A STUDY TO EVALUATE THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING ON KNOWLEDGE AND ATTITUDE REGARDING PREVENTION OF WORM INFESTATION AMONG MOTHERS OF TODDLERS IN SELECTED RURAL AREAS AT DINDIGUL DISTRICT

A DISSERTATION SUBMITTED TO
THE TAMILNADU DR.M.G.R. MEDICAL UNIVERSITY,
CHENNAI,
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
MASTER OF SCIENCE IN NURSING.

OCTOBER – 2016

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MISS.D.J.DINI

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CERTIFICATE

This is a bonafide work of **MISS D.J DINI**.M.Sc(N)II Year Student from Sakthi college of Nursing, Dindigul, Tamilnadu, India, submitted in partial fulfillment for the Degree of Master of Science in Nursing under the Tamil Nadu Dr.M.G.R Medical University, Chennai.

Signature of the Principal _____

Prof.V.JANAHI DEVI, M.Sc (N).,

College Seal _____

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1. RESEARCH GUIDE: _____

Prof.V.JANAHI DEVI, M.Sc (N).,
Principal,
Sakthi College Of Nursing,
Oddanchatram,
Dindigul (DT).

2. CLINICAL GUIDE: _____

Prof.V.JANAHI DEVI, M.Sc (N).,
HOD of child health nursing,
Sakthi College Of Nursing,
Oddanchatram,
Dindigul (DT).

3. MEDICAL EXPERT : _____

Dr.SATHEESH,MBBS,DCH.,
Medical officer,
Primary health care centre,
Kannivadi,
Dindigul (DT).

CERTIFIED BONAFIDE WORK DONE BY

MISS D.J.DINI

SAKTHI COLLEGE OF NURSING,

ODDANCHATRAM, DINDIGUL.

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREEE OF MASTERS OF NURSING FROM THE TAMIL NADU Dr.MGR UNIVERSITY, CHENNAI.

EXAMINERS

1. _____ 2._____

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ABSTRACT

A Study was conducted "To evaluate the effectiveness of video assisted teaching on knowledge and attitude regarding prevention of worm infestation among mothers of toddlers in selected hospitals at Dindigul District" was done by **D.J.Dini** as a partial fulfillment of the requirement for the Degree of Master of science in Nursing to the Tamilnadu Dr.M.G.R. Medical University, Chennai during the year 2014-2016.

The objectives of the study were, to assess the pre and post test level of knowledge and attitude on prevention of worm infestation among mothers of toddlers in control and experimental group, to evaluate the effectiveness of video assisted teaching on knowledge and attitude on prevention of worm infestation among mothers of toddlers in experimental group, to correlate the knowledge and attitude on prevention of worm infestation among mothers of toddler, to determine the association between knowledge and attitude on prevention of worm infestation and their selected demographic variables.

In this study a quasi-experimental non-equivalent control group pre test- post test design was adopted . Purposive sampling technique was used to select 30 samples in experimental and 30 samples in control group. Self-administered structured questionnaire was used to collect the demographic variables and to assess knowledge on prevention of worm infestation and to assess the level of attitude a modified Likert scale was used.

The result showed that majority of the mothers in the control group 22(73.3%) mothers had inadequate knowledge, 8(26.7%) mothers had moderately adequate knowledge and none of the mothers had adequate knowledge in pre test and post test

.

Where as in experimental group the knowledge of the mothers of toddlers were 23(76.7%) mothers of toddlers had inadequate knowledge, 7(23.3%) of the mothers had moderately adequate knowledge and none of them had adequate knowledge in the pre-test. In the post test findings majority of the mothers 27 (90%) had adequate knowledge, 3(10%) of the mothers had moderately adequate knowledge and none of the mothers had inadequate knowledge.

Finding revealed that in control group 25(83%) mothers had unfavourable attitude, 5(17%) mothers had moderately favourable attitude and none of the mothers had highly favourable attitude in the pre test. In post test 24(82%) mothers had unfavourable attitude, 6 (18%) mothers had moderately favourable attitude and none of the mothers had favourable attitude.

Finding shows that in experimental group 17(56.7%) mothers had unfavourable attitude, 13(43.3%) of the mothers had moderately favourable attitude and none of the mothers had highly favourable attitude in the pre test experimental group. In post test 28 (93.3%) of the mothers had favourable attitude, 2 (6.7%) of the mothers had moderately favourable attitude and none of the mothers had unfavourable attitude.

Finding shown that the mean score of knowledge and attitude in the post test were greater than the mean score of the pre test. The obtained "t-value" was highly significant at $P<0.05$ level.

The relationship between the level of knowledge and attitude were found to have positive correlations ($r=0.1767$) in the experimental group.

There was statistically significant association at the level of $P<0.05$ between knowledge of mothers of toddlers , and the place of defecation in the experimental group.

There was statistically significant association at the level of $P<0.05$ between attitude of mothers of toddlers and the monthly income in the experimental group.

There was no statistically significant association at the level of $P<0.05$ between knowledge of mothers of toddlers and their selected demographic variables in the control group.

There was no statically significant association at the level of $P<0.05$ between attitude of mothers of toddlers in the control group.

The above findings supported that the video assisted teaching helped to give adequate knowledge and develop favorable attitude regarding prevention of worm infestation among mothers of toddlers.

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INTRODUCTION

“Children are great imitators so give them something great to imitate”

Ferdanus.S

"We are the world, we are the children we are the one who makes a brighter day". These are the lines said by Michael Jackson. Children are the future of every nation across the world. If they learn good things and grow up, they can advise others in their life. Children are the budding stars, the more you embrace them the more they shine.

Children are the future of every nation across the world. It is today's generation which can go ahead and make the world a better place. We can learn, we can make others learn. All in all, we are the ones who can change the world if we want. We are the ones filled with enthusiasm of doing something for the country. And it only lies within our will power, that we can do wonders. We children can even teach our elders when it comes to doing something for the nation. With our will power strong and goals clear, we can defeat the greatest of people who can't make our country a better place. If we all come together and decide to do something, we sure that there is no one who can stop us. No one has the power to. So let us all heal the world and make it a better place. Let us all take an oath that we will strive to do anything for our nation and won't be afraid of anything that comes in our way, children are the future of our nation.

Mothers are the most powerful influence for good on the earth today. Within your hands lies the very future of the world! We welcome you and recognize the value of your priceless contribution to the nation, society, your families and those

dear ones with whom you interact each day, your children. During your time with us, you will discover through scientific research, as well as supernal teachings of truth, how important you really are as a Mother. Join us as we strengthen one another and Mothers around the world, experiencing (Shelly Locke ~ CEO)

In all the world there shall not be, a greater being than the 'Mother.' For she alone it is who holds her child's heart within her hands, and makes it into what it will someday be. And so the whole world goes, molded and shaped by Mothers in their hands, the tender lives of children formed in such a way, as to be magnificent and great. For the Mother's rich abode, lies within her arms and every child safe there, feels the same that they are indelibly impressed by her goodness and her strength, to be cared for and protected as they grow. To look up to her for nourishment and inspiration for their good. For the words of Mothers gently shared, caressed upon the mind, find their way into the whole wide world as the children find their way and thus become, all that they were meant to be, because she cared, because she took the time to share her wisdom and her grace, passed on through generations for all time, to benefit thereby and thus lift up the Mother's brimming heart, to serve the future by her love.

Helminthic infections refer to worms that live as parasites in the human body. Worm infection occurs when infective eggs, or larvae, enter the body, mature, lay eggs and feed off the person. People get infected with worms when living in an unclean environment of poor sanitation and unhygienic habits. The three main types of common intestinal worms that infect humans are large intestinal roundworm (*Ascaris lumbricoides*), hookworm *(Ancylostoma duodenale and Necator americanus*) and whipworm (*Trichuris trichuira*). Globally, more than 3.5 billion people are infected with intestinal worms. Of them, 1.47 billion have roundworm; 1.3 billion are

infected with hookworm and 1.05 billion with whipworm. The highest rates of roundworm, hookworm and whipworm infections are often in children between age 5 and 15. It is estimated that about 400 million school-age children are infected with these three types of worms. Analysis of infection prevalence by age group indicates that all age groups have infections. But the incidence of hookworm infection tends to grow with increasing age. Therefore, adolescent girls and women of childbearing age are generally infected with hookworm. This document focuses on hookworm and roundworm infections and their control through drug treatment as an entry point to promote improved sanitation and hygiene behavior. These are the key preventive measures leading to a clean living environment, which is necessary for the proper development and well being of our children.

Worm infection are one of the major health problems confronting millions of school-age children. These parasites consume nutrients from the children they infect, thus aggravating malnutrition and retarding physical development. They also destroy the tissues and organs in which they live. They cause abdominal pain, diarrhoea, intestinal obstruction, anemia, ulcers and various other health problems. These ailments can impair learning and slow cognitive development, ultimately resulting in poor school performances of a child. It is not uncommon for heavy or long-term infection to result in death, if treatment is not given in time. It is especially important to note that the stunting of children's growth due to worm infections is not easily recognized because it occurs almost imperceptibly over time. Thus, the full impact of intestinal infections is often greatly under-reported or overlooked. Intestinal worm infections destroy the well being and learning potential of millions of children in many developing countries.

Pre-school and school-age children and women of childbearing age, including adolescent girls, tend to have the higher proportion of worm infections. Although intestinal worms can infect all members of a population, these specific groups are at greater risk of heavy infections than others and are more vulnerable to the harmful effects of chronic infections. These vulnerable groups would benefit most from preventive interventions.

One third of the world's population is infected with one or more species of intestinal helminthes, and public health specialists are concerned that these infections impair children's growth and development. Studies have shown associations between helminthes infection and under nutrition, iron deficiency anemia, stunted growth, poor school attendance, and poor performance in cognition tests. Better sanitation reduces transmission, but another approach is to treat children or whole populations routinely to reduce infection rates. Whether this is a sustainable solution is not clear, as rapid reinfection occurs. Reports of successful combined programmes spanning several decades have come from Japan. The World Bank claims that worm infections impair learning and that helminthes control is one of the most cost effective strategies to improve health in developing countries. Both the World Bank and World Health Organization (WHO) promote helminthes control programmes in developing countries as a cost effective intervention. Programmes aim to "target mass treatment of children," giving all children in communities where worms are endemic anti-helminthic drugs every three to six months. Treatment regimens depend on local prevalence rate .

Rumona Dickson (2013) Worm infestation remains one of the main problems of child development. This is especially a greater health hazard in developing countries. Of 246 children, aged 7–12 years, attending school in rural Guatemala,

91% carried Safaris lumbricoides and 82% carried Trichuris trichura[1]. In Madagascar, a study revealed prevalence of 93% for Ascaris lumbricoides, 55% for Trichuris trichiura and 27% for Hookworm. The same authors in an earlier study have reported prevalence of 78% for Ascaris lumbricoides, 38% for Trichuris trichiura, 16% for hookworm and 0.4% for Schist soma mansoni in children in the Ranomafana rainforest, Madagascar. Impure water, low socio-economic state, poor sanitation coupled with low literacy rates of parents particularly the mothers are the main causes of this prevalent malady. Worm infestation is one of the major causes of childhood malnutrition, anaemia, stunted physical and mental growth, psycho-social problems and this along with repeated gastrointestinal and upper respiratory tract infection contributes to high morbidity in children and remains a major cause of high infant and child mortality in our country.

Watkins WE **(**2011) The magnitude of parasitic infestation among children constitutes a major public health problem in many parts of the world. In India, 87.5% of the sludge samples were positive with ascaris, toxocara, trichuris and hook worm. The poor standard of living includes improper disposal of fecal and other wastes, overcrowding, unhygienic health practices and poor environmental sanitation. All these lead to various experiences such as malnutrition and worm infestation. Helminthes infestations contribute significantly to the global burden of diseases in children especially in the tropical and sub-tropical regions. This might be due to the increased population and decreased environmental sanitation.

It had suggested that school drinking water and sanitation towards health and hygiene is globally recognized as a key intervention to promote children right to health and clean environment and to influence a general change in health promotion behavior and attitudes. The human excreta of a sick child is a carrier of disease and

the main focus on infection. It contains the disease agent which is transmitted to a new host through various channels such as water, finger, flies, soil and food. The environment is vast, but there are some important factors which should be controlled before any society can hope to reach optimal level of health, the minimal level of disease and the maximal span of human life. The hygienic disposal of fecal matter, providing safe water supply and adequate housing is way to reduce incidence of parasitic infestation.

UNICEF (2010**)** Worm infestation constitutes an important limitation on growth and development of children. In children with borderline nutritional status, worms can precipitate nutritional failure. Knowing size, shape of worms, larvae and eggs was important when treatment for each worm was different. With availability of broad spectrum antihelmintic drugs, it is not necessary that one should know morphology in details. Instead we should concentrate on the clinical pattern and drug details. Knowledge of breaking the life cycle is important from prevention point of view.

Dr Anil Mokashi (2012) In recent years the parasitologists, public health workers, international agencies such as WHO and Food Adulteration Organization (FAO**)** have recognized this and began to spend major part of their money to prevent parasitic diseases. The government of India has undertaken several accelerated programmes aimed at providing sources of safe water for a large number of villages and small towns.

Integrated Child Development Service (ICDS) is yet another programme which includes de-worming as one of the objectives in which they periodically de-worm children below six years in slum areas by administering anti-helminthic drugs. The aim of the prevention of worm infestation is to break the unawareness of worm

infestation through education to enable the mothers to have a good positive attitude towards the prevention of worm infestation.

NEED FOR THE STUDY

Prevention is the key, but early intervention can improve the outcomes. The global strategy is health for all which move towards primary health care that can be possible only by encouraging the community participation and mobilizing the community resources and using appropriate technology for reducing the mortality and morbidity among children.

UNICEF(2014) One billion people worldwide still practice "open defecation" and they need to be told that this leads to the spread of fatal diseases, U.N. experts launch of a study on drinking water and sanitation. Excreta', 'feces', 'poo', I could even say 'shit' maybe, this is the root cause of so many diseases," said Bruce Gordon, acting coordinator for sanitation and health at the World Health Organization. Societies that practice open defecation - putting them at risk from cholera, diarrhoea, dysentery, hepatitis A and typhoid - tend to have large income disparities and the world's highest numbers of deaths of children under 5 years old. Attempts to improve sanitation among the poorest have long focused on building latrines, but the United Nations says that money literally went down the toilet. In all honesty the results have been abysmal," said Rolf Luyendijk, a statistician at the U.N.'s children fund UNICEF.

A report jointly prepared by the WHO and the UNICEF says 2 million people practice open defecation in India(2014)India still has the largest number of people defecating in open in the world, according to a new UN report prompting the Government to admit it as a “huge shame.” “Globally, India continues to be the country with the highest number of people (597 million people) practicing open defecation,” says the report the Progress on Drinking Water and Sanitation 2014

update released in Geneva The report jointly prepared by the WHO and the UNICEF says that eighty-two per cent of the one billion people are practicing open defecation in the world live in just 10 countries. The UN findings prompted Rural Development Minister Jairam Ramesh to term it as "a huge shame for all of us." "I have been saying all this for three years now. Sanitation has to become a national obsession. It is a huge shame for all of us," said Mr. Ramesh, who took several steps to eradicate the menace of open defecation in the country.

According to the UN, countries where open defecation is most widely practiced have the highest number of deaths of children under the age of five, as well as high levels of under-nutrition, high levels of poverty and large disparities between the rich and poor. There are also strong gender impacts: lack of safe, private toilets makes women and girls vulnerable to violence and is an impediment to girls' education, it says.

Current study was undertaken from 2013 to 2014 in India All outdoor as well as indoor patients advised stool examination formed the study population and it included 2656 males and 76 females children. Investigations included stool examination and blood counts. Overall prevalence of intestinal worm infection was found to be 49.38%. Ascaris was the most common parasite (46.88%), followed by Taenia (2.1%) and *Hymenolepis nana* (0.21%)

According to the WHO (2013) had estimated that about 1400 million people world wide are infected with any one of the three kinds of intestinal helminthes. They are round worm, hook worm and whip worm infestation. In that 200 million children suffer from diseases associated with these infestations. At least 40% of the world's children in the school age group among them about 400 million are infested with intestinal worms. Their growth, nutrition and learning ability are adversely affected.

Intestinal worms constitute a public health and socio-economic problem due to lower environmental and imbalance nutritional situation, which can be the major causes for mortality in the world.

Chakma, et al., (2011) had estimated that nearly one fourth of the world's population harbor one or more intestinal worms in their intestinal tract. In India, the problem is likely to be more common because of poor hygiene, unawareness, and non literacy.

WHO (2010) had stated that the number of round worm infestation was 1450 in million in which mortality and morbidity rate was 350, 65 million respectively. To control these problems the community health nurse has a vital role. She is necessary to provide the preventive education to children and to their families regarding good hygiene and health habits such as proper hand washing before eating or handling food and after using thse toilet etc. The investigator observed in villages, many school going children with pot belly abdomen with malnutrition and they are suffering from abdominal pain, vomiting, diarrhea very often. Particularly the school children are more prone to get round worm infestation. So the investigator planned to conduct the study to assess the effectiveness of teaching programme on round worm infestation among middle school children at Maduranthagam, Kancheepuram.

Rai SK.,et al. Intestinal worm infestation is one of the major childhood health problem in Nepal. This study was done to assess the prevalence of intestinal worm infestations among toddlers in a in Kathmandu Nepal. A total of 142 stool samples from healthy students were collected and reported following for mol-ether concentration technique. The overall prevalence of intestinal worm infestation was found to be 17.6% (Boys 22.0% vs girls 13.5%). Children were found to be highly infected with intestinal worms (21.4%) followed by 9-12 years old (18.6%). Those

between 13-16 years of age were significantly less infected (10.7%) compared to others ($p < 0.05$). Ova/cysts of intestinal parasites detected include Trichuris trichiura (32.0%), Ascaris lumbricoides (20.0%), Hymenolepis nana (16.0%), hookworm (8.0%) and 24.0% cases showed mixed parasitic infections.

Cam P D.,et al. This paper provides a review of surveys on soil-transmitted helminths that were done in Vietnam . Prevalence estimates could be obtained for 29 of the 61 provinces. Extrapolating from this, it is estimated that 33.9 million people in Vietnam are infected with Ascaris (prevalence 44.4%), 17.6 million with Trichuris (prevalence 23.1%), and 21.8 million with hookworm (prevalence 28.6%). Prevalence of Ascaris and Trichuris showed a declining trend from the north to the south of the country.

Out of 843.97 millions of population children constitute a major properties of forty eight percent who are vulnerable to infection and face high morbidity and mortality. The morbidity rate under 0-1 years and 5- 14 years were 12.0 percent and 22.9 present respectively. Increased morbidity rate amount all child hood disorders common intestinal worm infestations affect the health of the children very much. Out of 843.97 millions of population children constitute a major properties of forty eight percent, who are vulnerable to infection and face high morbidity and mortality. The morbidity rate under 0-1 years and 5- 14 years were 12.0 percent and 22.9 present respectively. Increased morbidity rate amount all child hood disorders common intestinal worm infestations affect the health of the children very much.

A study conducted in Anganwadi centre under Integrated Child Development Scheme (ICDS) in Lucknow, India, 32 children under age group of 1.5 to 3.5 years revealed that parasites were detected in17.5% children by a single direct fecal smear examination. The mean hemoglobin levels for children who were smear positive vs

smear negative for ascaris or giardia were 9.1gm/dl and 9.6gm/dl. The study emphasized on the urgent steps needed on community basis to improve their nutritional status and control parasitic infestation. It also suggested the need for studies with larger sample size of assess the effect of control of parasitic infestation on improvement of hemoglobin levels.

STATEMENT OF THE PROBLEM

"A study to evaluate the effectiveness of video assisted teaching on knowledge and attitude regarding prevention of worm infestation among mothers of toddlers in selected rural areas at Dindigul District".

OBJECTIVES OF THE STUDY

1. To assess the pre and post test level of knowledge and attitude on prevention of worm infestation among mothers of toddlers in control and experimental group.
2. To evaluate the effectiveness of video assisted teaching on knowledge and attitude on prevention of worm infestation among mothers of toddlers in experimental group.
3. To correlate the knowledge and attitude on prevention of worm infestation among mothers of toddlers.
4. To determine the association between knowledge and attitude on prevention of worm infestation and their selected demographic variables.

HYPOTHESIS

H1: The mean post test level of knowledge and attitude will be significantly higher than the mean pre test level of knowledge and attitude among mothers of toddlers in experimental group.

H_2: The mean post test level of knowledge and attitude in experimental group will be significantly higher than the control group.

H3: There will be a significant correlation between level of knowledge and attitude on prevention of worm infestation among mothers of toddlers.

H_4: There will be significant association between level of knowledge and attitude on prevention of worm infestation among mothers of toddlers and their selected demographic variables.

OPERATIONAL DEFINITION

Effectiveness

It is defined as to determine the extent to which the video teaching programme on prevention of worm infestation has achieved the desired effect as expressed by gain post test knowledge and attitude score.

Video assisted teaching programme

It refers to this programme first facilitator guides the discussion secondly video CD that comprised of information regarding prevention of worm infestation.

Knowledge

It refers to the responses given to structured questionnaire regarding prevention of worm infestation.

Attitude

It refers to the way of thinking believes and feeling regarding prevention of worm infestation as expressed in the form of statement as assessed with a modified Likerts scale developed by the investigator & aid in the positive outcome of a mothers of toddlers.

Prevention

It refers to the measure taken by the mothers with toddlers to see that the children are not affected with worms.

Worm Infestation

Helminthic infection refer to worms that live as parasites in the human body. Worm infection occurs when infective eggs, or larvae, enter the body, mature, lay eggs and feed off the person.

Mothers

It refers to a married woman between 21-35 years of age with toddler in selected rural area at Dindigul district.

Toddlers

It refers to children between the age group of 1-3 years.

ASSUMPTION

The study assumes that

- Mothers who are having educational background may have knowledge towards the prevention of worm infestation.
- A video assisted teaching may enhance their knowledge on prevention of worm infestation.
- Enhanced knowledge may create a positive attitude towards a prevention of worm infestation.

DELIMITATIONS

. The study is delimited to

- Mothers with toddlers (1-3years) at selected rural areas
- Mothers in the age group of 21-35 years

- Mothers who can read and write Tamil
- Mothers who are willing to participate in the study
- Data collection period for 6 weeks.

PROJECTED OUTCOMES

The projected outcome of the study includes.

- ❖ The findings of the study would help to identify the level of knowledge and attitude of mothers of toddlers about prevention of worm infestations.
- ❖ The development of the video assisted teaching programmer will help to improve knowledge and attitude towards the prevention of worm infestation.
- ❖ The video assisted teaching programme should enable the learner to grasp the information more easily and it remains in their mind for longer.

CHAPTER-II

REVIEW OF LITERATURE

CHAPTER II

REVIEW OF LITERATURE

Literature review is a systematic search of a published work to gain information about a research topic.

(Polit & Beck, 2010)

Conducting a review of literature is a challenging and enlightening experience. The task of review of literature involves the identification, selection, critical analysis and reporting of existing information on the topic of interest. Through the review the researcher generates a picture of what is known about a particular situation and the knowledge gap that exists between the problem statement and the research subject and lays the foundation for the research plan.

The investigator intended to review the literature available on prevention of worm infestation using both research and non-research articles. The purpose of the review is to get a comprehensive knowledge base about prevention of worm infestation and the effectiveness it has on the knowledge and attitude of mothers of toddlers.

The review of literature for the study is organized under the following sections;

-Studies related to prevalence of worm infestation.

-Studies related to the knowledge of mothers on prevention of worm infestation.

-Studies related to the attitude of mothers on prevention of worm infestation.

-Studies related to the effectiveness of prevention of worm infestation teaching.

STUDIES RELATED TO PREVALENCE OF WORM INFESTATION

Brijender Singh et al. (2015)A conducted a descriptive study. More than 1.5 billion people, or 24% of the world's population, are infected with soil-transmitted helminthes infections worldwide. Infections are widely distributed in tropical and subtropical areas, with the greatest numbers occurring in sub-Saharan Africa, the Americas, China and East Asia. Over 270 million (28%) preschool-age children and over 600 million(32%) toddlers. children live in areas where these parasites are intensively transmitted, and are in need of treatment and preventive interventions.

Kattula .D (2015) The WHO estimates that more than 2 billion population is infested with worm infection. A cross sectional study was carried out in the rural block Beria (District Jhajar, Haryana). A total of 200 students were enrolled i.e. 100 from each government primary school were included in the study. Screening for hookworm infection was carried out by taking samples of finger nail contents of both hands of each subject using sterile-moistened cotton-tipped swab of all those children who had untrimmed nails by a trained laboratory technician. The result showed that prevalence of hook worm ova was present be (76.5%) in the finger nails.

Kattula et al., (2014) carried out a randomized study on prevalence & risk factors for soil transmitted helminthes infection among school children in south India and they reported that there was a wide variation in the prevalence of helminthes infestation across various schools ranging from 0-20.4 per cent. Periodic deworming of schoolchildren as per National iron initiative programme, school teachers should be check nails of children once in a week, health education like personal cleanliness should be imparted to children and government health functionaries must visit the schools regularly for health check-up and health education.

paudel .F (2013) A cross sectional study to measure the prevalence of worm infestation among toddlers of Dharan. Stratified random sampling method was applied to choose the schools and the study subjects. The Chi-square test was used to measure the association of risk factors and worm infestation. Overall prevalence of worm infestation among the schoolchildren was 11.3 %. Taenia species was found very high (5.3%)in comparison to other worms i.e. Hookworm (2%), Ascarislumbricoides (1.9%), Trichuris trichiura (1%), Hymenolepsis nana(0.7%) and Enterobius vermicularis (0.3%). Results shows no significant relationship was traced among the factors in the causation of worm infestation .

WHO (2013) conducted a study by the Delhi Government's Health and Family Welfare Department in association with development partner Deworm the World has revealed. which took a sample of 3,251 city children, analyzed the data on a district-wise basis to establish the level of parasitic worm infestation among the children. It also revealed average prevalence for slums to be the highest in the West District at 26.3 %. Overall, the prevalence was higher in the age groups 1-5 years (17.3 %) and 6-12 years (16.1%) compared to the age group 13-18 years (12.7 %)

Maheswari et al (2012)A Comparative study was conducted on the prevalence of intestinal parasites among children living in rural and urban settings in and around Chennai. They collected 324 stool samples by convenient sampling method out of 324 samples 125 specimens were collected from rural area and 199 stool sample were collected from urban area. The findings revealed that the overall prevalence of intestinal parasites was 91%. Among that ascaris lumbricoidis was 52.8%, trichiuris trichura was 45.6 % and anchylostoma duodenal was 37.6 per cent.

Uma Kiran et al (2011) This is a cross-sectional study conducted among school children of age 5-12 years at rural areas of Davangere district. Five stool

samples on five consecutive weekends were collected from each of the 474 children. Stools were examined for the presence of intestinal parasites. Results out of the 474 samples, 237 were positive by the end of 5th week stool sample. Nearly 89.9% of the parasites were identified in the first and second stool samples, 92.8% were identified by the 3rd stool sample, 95.4% were identified in the 4th stool sample and virtually all the parasites seen in the study were identified in the fifth stool samples. The prevalence of worm infestation is 50%. Ascaris lumbricoides (18.5%) and Ancylostoma duodenale (16.3%) were most common parasites. Majority of the children who were affected belong to early age groups and girls were more affected than boys.

STUDIES RELATED TO THE KNOWLEDGE OF MOTHERS ON PREVENTION OF WORM INFESTATION

Jain Abhishek (2014) Conducted a Study to Assess the Knowledge and Knowledge of Practices Regarding Toilet Training among Mothers of toddlers Children in Urban Community at Udaipur City. A descriptive design and the sample consisted of sixty mothers having toddlers and Convenience sampling technique was used to select the subjects. The tool consisted of structured questionnaire. Results Among 7 demographic variables it was noticed that four variables found to be statistically significant at 5 per cent level ($P<0.05$) & the association with Knowledge of practice level, it can be seen that age, education, occupation and religion found to be significant at 5 % level ($P<0.05$) and the remaining variables found non-significant. Knowledge and Knowledge of practice found to be adequate among mothers regarding toilet training.

Rimple Sharma, et al (2014) A cross sectional observational community based study was conducted to assess the knowledge regarding worm infestation in

children among urban and rural mothers attending OPD in Guru Teg Bahadur Sahib (C) Hospital, Ludhiana, Punjab. Quantitative Research approach and Non Experimental Comparative research design was used. Using convenient sampling technique a sample of 100 mothers including 50 residing in urban area and 50 residing in rural area and having children in the age group of 0-10 years were selected. Data was collected using self structured questionnaire and results were analyzed using descriptive and inferential statistics. The findings of the present study revealed that mean knowledge score of urban mothers was higher (18.86%) as compared to rural mothers (16.96%) regarding worm infestation in children.

Olaniyi J.et,.al (2013) A descriptive study was conducted to assess the students knowledge among worm infestation in school children in Jaipur district . 60 samples by propability sampling technique, pre-test post- test design .The students knowledge was assessed by means of interview method . Majorities of the primary school children 10(20%) are having positive attitude regarding causes of roundworm infestation and 40(80%) of children are having negative attitude regarding causes of roundworm infestation. Majorities of the school children 44(88%) are having positive attitude regarding prevention of worm infestation and 6(12%) of school children are having negative attitude regarding prevention of worm infestation.

Daniel mart 2012) A descriptive study was conducted to assess the knowledge of the mother with defecation practices in relation to the prevalence, intensity and associated risk factors for infestation with Ascaris, hookworm and trichuris in tea growing communities of Assam. Single faecal sample were collected from 328 individual and was subjected to Kato-Katz quantitation technique. The overall prevalence of Ascaris was 38%, hookworm and trichuris was 43%. Results

showed that, the children of mother with lack of knowledge, open field defecation practices were suffering with one or other helminthes infestations.

David Joseph Diemer et al (2011) A qualitative and quantitative study to asses the knowledge attitude practice village house hold in western e d'Ivoire .Quantitative methods consisted of a structured questionnaire administered to household heads. In the villages with community-based interventions, three-quarters of household interviewees knew about intestinal schistosomiasis compared to 14% in this village where school-based interventions were implemented (P<0.001). Whereas two-thirds of respondents from the community-based intervention village indicated that the research and control project was the main source of information, only a quarter of the respondents cited the project as the main source.

STUDIES RELATED TO THE ATTITUDE OF MOTHERS ON PREVENTION OF WORM INFESTATION

Sharma Gautam (2014) conducted a study to assess the health and welfare status and rights of toddlers of age 1-3 years in slums of Agra city. Baseline information revealed that the health and living standards of children, socio-economic and educational profiles were very low and mortality and morbidity was very high. Personal hygiene was poor in 73%of children, nails were not trimmed in, 75% took bath irregularly, in 85% teeth was dirty and the results showed poor personal hygiene was predisposing to gastrointestinal and parasitic disorders.

Veerannan (2013) conducted a cross sectional study to estimate rate of parasitic infestation in relation to age, sex, diet, environmental hygiene and economic status around Madras city. Baseline information was collected. Faces samples of 348 persons were tested. The study revealed 37 (10.62%) had Ascaris lumbricoids, 24(6.89%) had Aanchylostoma duodenalle, 9(2.58%) has Enterobius vermicularis.

Ascaris had the highest incidence 11(23.87%) in zero to ten years and Enterobius vermicularis 2(4.34%) in zero to ten years. Ascaris lumbricoided was comparatively higher in females & in non-vegetarians. The study revealed that provision of latrine would significantly lower the incidence of intestinal parasites. Surprisingly the prevalence rate was higher among the members using tap water than those who are using well water. The findings indicated that economic status was also an important factor governing the prevalence of parasitic infestation.

Kings.,(2012)A cross sectional study was conducted in China to understand the infection status and risk factors of soil transmitted nematodes by Kato-Katz technique and influencing factors were surveyed by using a standardized questionnaire. A total of 1707 children were examined with a soil transmitted nematode infection rate of 22.2%, the crowd infection rates of Ascaris lumbricoides, hookworm and Trichuris trichiura were 16%, 3.8% and 6.6% respectively and 495 children were examined on Enterobius vermicularis eggs, with the infection rate of 5.1%. The educational level of mother could reduce the probability of infection (ME=-0.074), while the number of drinking unboiled water and raising livestock and poultry could increase the probability of the infections (with ME of 0.028,-0.112 and 0.080 respectively. Implementing the health education about parasitic diseases in mothers would be of great significance prevention and control of soil transmitted nematodiasis.

Sumathi .N (2012)., A descriptive study with cross sectional survey approach was undertaken to assess the knowledge and attitude of the mothers on prevention of food and water borne diseases of under five children in Rajapalayampanchayath, Salem. Hundred and four mothers were selected by convenient sampling technique and data were collected by using structured interview

schedule. The findings was 17.3± 4.2 which is 52.6% of the maximum scores revealed average knowledge and attitude. Area-wise highest mean score was 3.9 ±2.5 which is 65% of the maximum score was obtained for the area ",whereas lowest mean score was 1.6 ± 0.9 which is 40%of the maximum score was obtained for the area.

Marchel et al (2011) A cross sectional study was conducted in Kapasia, Gazipur (Bangaladesh) with simple random sampling. A total of 140 samples under 6-10 years of age was interview with one structure questionnaires and one check list. Among all respondent 21.4% has facility of latrine. Routine stool examination for Helminthes was done and it was evident that out of 140 respondents 62(44.3%) were found to be parasite positive. Relationship between intestinal parasites and sanitary practices was statistically significant.

Salimohana (2011) A experimental study was conducted in Kathmandu valley, Nepal to find the intestinal parasites among the stools collected from open-field defecating street children with 93 stool samples by convenient sampling technique. Stool microscopy analysis result shows that majority of stool specimens were brown or pale yellow(63.4%), soft-formed(78.5%), without blood(96.8%), with mucus (62.4%), and without adult forms of helminths (98.8%) the entire stool specimen was positive for intestinal parasite.

STUDIES RELATED TO THE EFFECTIVENESS OF PREVENTION OF WORM INFESTATION TEACHING

Muhammad zahid latif, et al (2014) An cross-sectional descriptive study to asses effectiveness of video teaching conducted on 97 children living in Union Council Mangri, Tehsil Shakargarh, District Narowal using non-probability convenient sampling. Pretested questionnaire was used to collect demographic data and microscopic examination of stool for ova and parasite for was done. Intervention

video teaching was given. Post test was conducted Response was collected from 97 mothers of children under 12 years of age among whom 58 (59.8%) were male and 39(40.2%) children were female. Results found in 85(87.6%) had ova in the stool.

Bhondeley. MK., et al., (2014) Conducted a quasi experimental study to assess the effectiveness of teaching programme on round worm infestation among middle school children. Quasi experimental design (one group pre and post test). 100 samples were selected by Simple random technique by lottery method from VI and VII standard students of Hindu coronation middle school at Madhuranthagam. Pre test was conducted by using structured questionnaire . After seven days post test was conducted. The data on pre test knowledge on round worm infestation among middle school children shows that out of 100 samples, 10% had inadequate knowledge, 74% had moderately adequate knowledge, 16 were adequate knowledge on round worm infestation. The improvement of knowledge on round worm infestation of middle school children in post 25 (25%) had moderate knowledge, 75 (75%) had adequate knowledge, no one had inadequate knowledge. The results shows that there was improvement in overall in aspects of knowledge on round worm infestation at level of $p<0.001$.

Williams walana et.,al (2013) A retrospective study to assess the effect of sanitation on infection with soil-transmitted helminthes in vetnam . Random effects meta-analyses were used to account for observed heterogeneity in 100samples . Availability of sanitation facilities was associated with significant protection against infection with soil-transmitted helminths (0.46 to 0.58). Regarding the use of sanitation, ORs of 0.54 (95% confidence interval [CI] 0.28–1.02), 0.63 (95% CI 0.37–1.05), and 0.78 (95% CI 0.60–1.00) were determined for *T. trichiura*, hookworm, and *A. lumbricoides*, respectively. The overall ORs, combining sanitation availability

and use, were 0.51 (95% CI 0.44–0.61) for the three soil-transmitted helminths combined, 0.54 (95% CI 0.43–0.69) for *A. lumbricoides*, 0.58 (95% CI 0.45–0.75) for *T. trichiura*, and 0.60 (95% CI 0.48–0.75) for hookworm. our results reveal that sanitation is associated with a reduced risk of transmission of helminthiases to humans.

Mamta Rajput (2013) This pre-experimental research study to assess the effectiveness of structured teaching program was conducted on students of 6^{th} and 7^{th} class of Government High School, Punjab. Total of 35 students were recruited for the study via convenient sampling technique. One group pre-test post test research design is used Data was collected using self-structured knowledge questionnaire on worm infestation which consisted of 2 sections After 7 days of teaching session again Knowledge questionnaire was administered to students to assess the posttest knowledge. Results indicate the increase in the knowledge scores of school children after implementation of STP as about 83% of the children had attained good knowledge in post test and the mean pretest knowledge score of children was 13.88+ 3.62 whereas after the structured teaching programme the score has been increased to 16.71+2.07. The mean difference was +2.83 which was statistically significant at 0.05 levels.

C. J. UNEKE (2012) A retrospective study was conducted among school-age children in sub-Saharan Africa.To know the effectiveness of Albendazole, mebendazole, and praziquantel were the antihelminthic drugs most commonly evaluated. Cure rates >80% and egg reduction rates >90% were recorded in most cases of schistosomiasis using praziquantel. Albendazole was very effective against lumbricoides and hookworm infections with majority of the studies recording cure rates was >75%.

Luther et al (2011) A cross-sectional descriptive study to asses effectiveness of structured teaching conducted on 2000 childrens living in , Tehsil District Narway using convenient sampling. Pretested questionnaire was used to collect demographic data Intervention was given to their mothers. Results shows mean value is 3.24which is highly significant at $p<0.001$.

Manosa (2011) A cross-sectional study was conducted on 256 children and their mothers in a poor Nepal district to assess effectiveness of STP on mother's knowledge and practices with regard to parasitic infections and infestation among their preschool children. A pre-designed knowledge and practice questionnaire was used to assess the mothers' knowledge and practices. A stool sample was collected from children and examined using formal-ether technique and cellophane tape technique to detect pinworm. The result showed that 46% children were affected with pinworm, socio-economic level affected both knowledge and practice scores where one point change in knowledge score or socio-economic score caused as increase in practice score of 0.279 and 0.071 respectively. After intervention the majority of mothers (77.3%) were found to be aware that their children had a parasitic infection, which was significantly associated

Thomas Lavares et al (2011) descriptive study was conducted to determine the prevalence, risk factors, and nutritional consequences of intestinal parasitic infection in rural children in Virginia, USA. A total of 244 children aged 2-14 years were studied. The data was collected using a structured questionnaire, anthropometry and laboratory analysis of blood and faecal samples. The result showed that 90% of subjects were infected with at least one pathogenic intestinal parasitic infection: 51% with helminthes, 37.6% of the subjects were infected with both Giardia and Ascaris. Infected children had a risk for stunted growth that was twice that of the other

children (51.7% Vs 33.1%). This study highlighted the need for periodic de-worming of children, educating mothers regarding improvement of personal hygiene, and food hygiene.

Nebhinan (2011) A longitudinal study was conducted in between a gap of 30 months to find out whether the primary health care intervention was effective in reducing the prevalence of three common intestinal nematode infections i.e., ascaris lumbricoides, trichuris and hookworm in three communities in Negeria. Primary health care was provided by auxiliary aids, health inspectors, field assistants and to provide screening, surveillance environmental sanitation and mass expulsion chemotherapy. Overall percentage of infestation were decreased by 78.7 %.

CONCEPTUAL FRAME WORK

The conceptual frame work of the present study was developed by the investigator is based on Nola Pender Health Promotion Model (1997) That is mostly applicable while dealing with prevention of worm infestation and promoting health life through videos assisted teaching programme.

Major Concept

A. Person

- Man has the ability to express human health potential and has the capacity for reflective self awareness, including the assessment of his own competencies
- The important of an individual's unique personal factors or characteristics and experience will depend on the target behaviour for health promotion.

B. Health

- Health promotion is defined as client behaviour towards developing well being and actualizing human health potential .
- Health protection is client behaviour geared towards preventing illness, detecting it early or maintaining function .

C. Nursing

- The trend towards health promotion has created the opportunity for nurses to strengthen the professions influence on health information disseminate information that promotes an educated public and assist individuals and communities to change long –standing health behaviour.

D. Environment

Individuals are more apt to perform behaviour if they are comfortable with the environment versus feeling alienated .Environments that are consider safe as well as facilitate health promotion behaviour.

Key concepts

Individual characteristics & experiences

- Prior related behaviour
- Most of the toddlers have worm infestation and mothers have less knowledge about prevention of worm infestation and unfavourable attitude towards the prevention of worm infestation.
- Personal factors

  Mothers of toddlers have inadequate knowledge an attitude towards prevention of worm infestation and they follow poor sanitations.

Behavior specific cognitions & Affect

- Perceived benefits of action.
- In this study the video assisted teaching program regarding prevention of worm infestation is helping the mothers of toddlers to improve their knowledge and attitude worm infestation.
- **Perceived barriers to action**
  - Perceived self-efficacy
  - Activity-related affect
  - Interpersonal influences
  - Situational influences

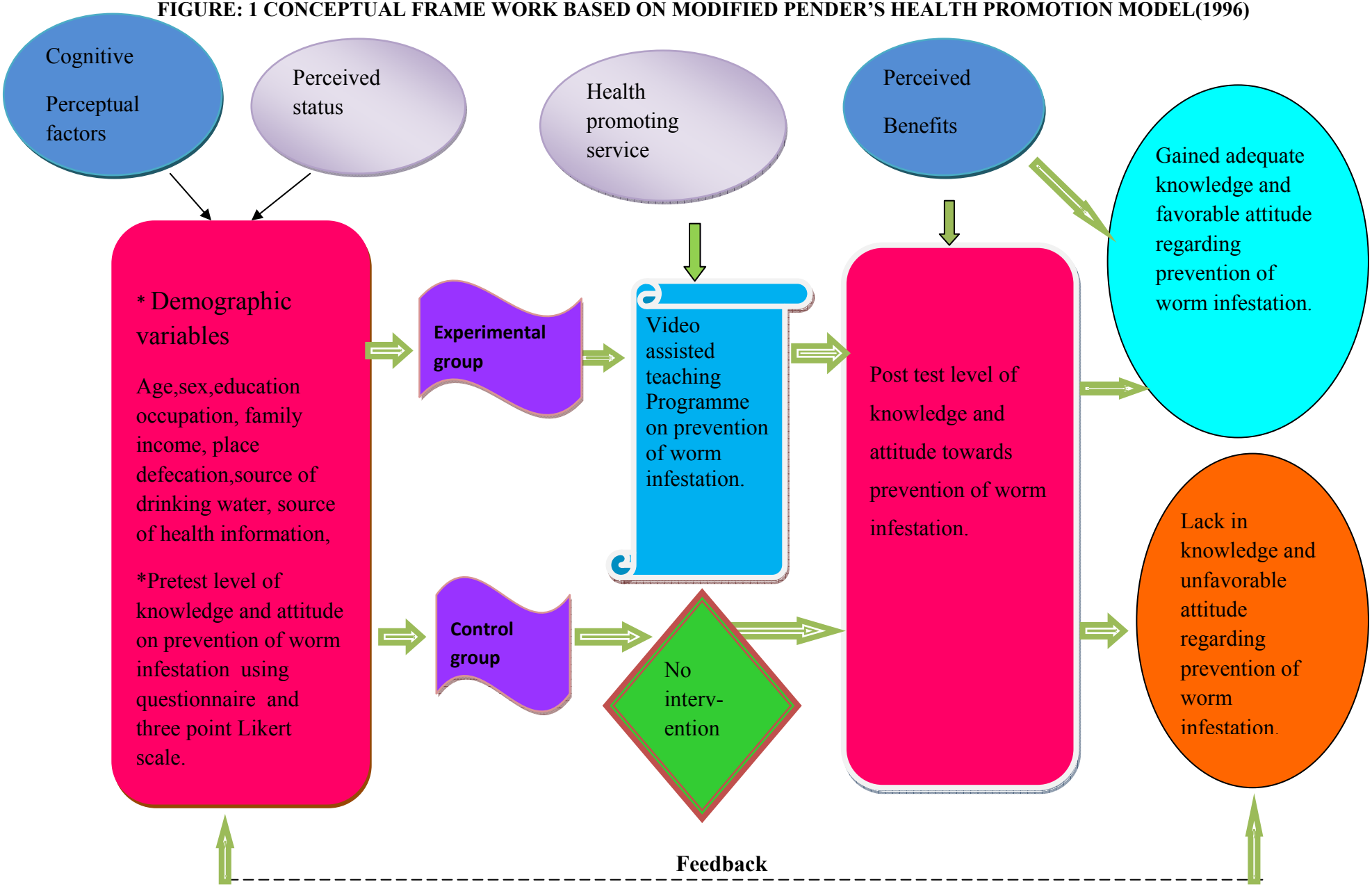
In this study the interpersonal and situational influences act as a perceived barrier to action.

Behavioral Outcomes

- Commitment to a plan of action
- Immediate competing demands & preferences
- Health-Promoting behaviour

After video assisted teaching programme, most of the mother of toddlers showed the adequate level of knowledge and favourable attitude regarding prevention of worm infestation which indicated health promoting behaviour.

FIGURE: 1 CONCEPTUAL FRAME WORK BASED ON MODIFIED PENDER'S HEALTH PROMOTION MODEL(1996)



CHAPTER-III

METHODOLOGY

CHAPTER-III

RESEARCH METHODOLOGY

Research methodology is the research design to develop or refine methods of obtaining, organizing or analyzing data.

(Polit & Beck 2013)

This phase of study included selecting a research design, variables, setting of the study, population, sample, inclusive and exclusive criteria for sample selection, sample size, sampling technique, development and description of the tool, content validity, pilot study, reliability, and procedure for data collection and plan for data analysis.

RESEARCH APPROACH

Quantitative research approach is essentially about collecting numerical data to explain a particular phenomenon, particular questions that seem immediately suited to being answered using quantitative methods. The quantitative research approach was used for the present study.

RESEARCH DESIGN

Quasi experimental design involves the manipulation of an independent variable that is an intervention. Quasi experimental design lacks randomization, the signature of a true experiment. ***(Beck 2013).***

To achieve the objective of the study the research design selected was 'Quasi experimental non-equivalent pretest – post test design.

GROUP	PRE TEST	MANIPULATION	POST TEST
EXPERIMENTAL	O_1	X	O_2
CONTROL	O_1	-	O_2

Key

O_1 - Assess the knowledge & attitude of mothers of toddlers on prevention of worm infestation (Pre test).

X - Intervention(Video assisted teaching on prevention of worm infestation)

O_2 - Assess the knowledge & attitude of mothers of toddlers on prevention of worm infestation(Post test).

VARIABLES UNDER THE STUDY

Independent variables

Video assisted teaching on prevention of worm infestation**.**

Dependent variables

Knowledge and attitude of mothers of toddlers towards the prevention of worm infestation.

Demographic variables

The demographic variables includes age, religion, educational status of the mother, occupation, total income of the family per month, place of defecation, source of drinking water , source of health information.

SETTING OF THE STUDY

Setting is the general location and condition in which data collection takes place for the study. **(Polit and Beck,2013).**

The setting of the study was selected in Reddiyarpatty for experimental group and Ammapatty for control group at Dindigul district located 10 kilometers away from Sakthi college of nursing.

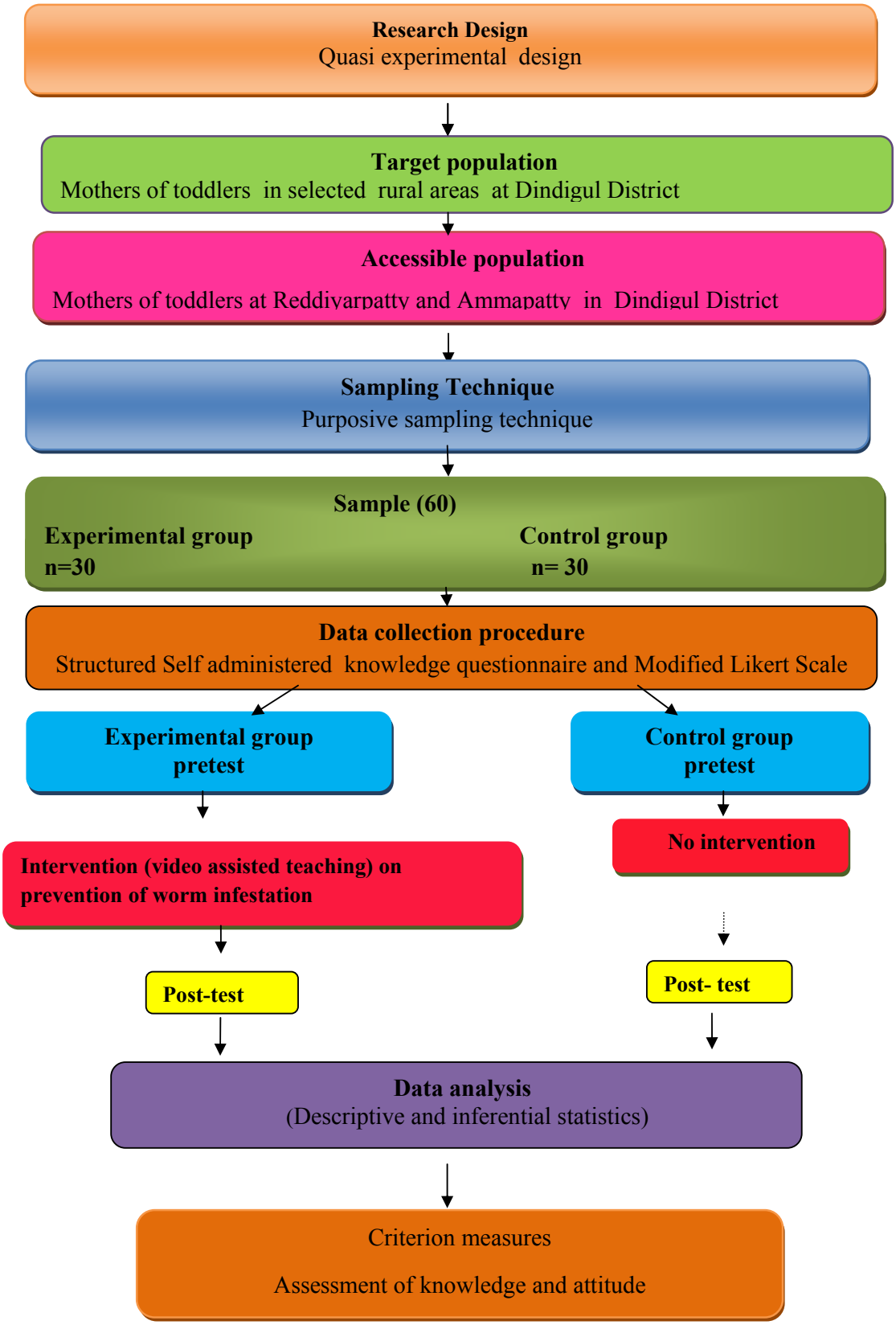


Figure 2. Schematic Representation of Research methodology.

POPULATION

The population is defined as the entire set of individuals or subjects having common characteristics some time called universe. **(polit and Hungler ,2013)**

The **target population** comprises of mothers of toddlers in selected rural areas at Dindigul District.

The **accessible population** comprises of mothers of toddlers in Reddiyarpatty and Ammapatty at Dindigul district.

SAMPLE

A subset of a population, selected to participate in a study.

(Polit and Hungler, 2013)

The sample selected for the present study was 60 mothers of toddlers from selected rural areas at Dindigul District.

SAMPLE SIZE

A Sample of 60 mothers having toddlers who fulfilled the criteria were selected 30 samples for control group and 30 for the experimental group.

SAMPLING TECHNIQUE

Sampling is a process of selecting a portion of the population to represent the entire population can be made. **(*Hungler, 2013)***

Purposive sampling technique was adopted for this study

CRITERIA FOR SAMPLE SELECTION

Inclusion criteria

a) Mothers who can able to read and write Tamil
b) Mothers who are willing to participate in the study
c) Mothers who are available at the time of data collection

Exclusion criteria

a) Mothers who do not have toddlers
b) Mothers who were already exposed to video assisted programme regarding worm infestation
c) Mothers who are below 21and above 35years of age.

DESCRIPTION OF THE TOOL

The tool was constructed after extensive review of literature and consultation with medical and nursing experts. The tool comprised of four parts.

PART I

The demographic variables includes Age, Educational status of the mother, Occupation , Religions, Total income of the family per month, Place of defecation, Source of drinking water , Source of health information.

PART II

Self administered structured questions it consist of 30 items to assess the knowledge related to prevention of worm infestation. It is based on Definition of worm infestation, Causes of worm infestation, Life cycle of worms, Mode of transmission, Clinical manifestation of worm infestation, Diagnostic evaluation, Management of worm infestation, Prevention and Home remedies of worm infestation.

PART III

It consist of three point Likert scale of 20 items to assess the attitude of the mothers of toddlers towards prevention of worm infestation with positive and negative statements

PART IV

It consisted of a video on prevention of worm infestation to educate the mothers of toddlers in the experimental group. A video compact disc was prepared to provide information to mothers of toddlers on the aspects of definition, causes, types of worms, lifecycle, mode of transmission, signs and symptoms Diagnostic Evaluation, treatment, prevention and home remedies of worm infestation.

SCORING KEY FOR ASSESSING OF THE KNOWLEDGE

Consisted of multiple choice questions to assess the knowledge. Total score was "30". Scoring for the correct answer was "1" and "0" for wrong answer.

LEVEL OF KNOWLEDGE

>76% - Adequate knowledge

51-75 % - Moderately adequate knowledge

<50% - Inadequate knowledge

SCORING KEY FOR ASSESSING OF THE ATTITUDE

S.No	Items	Strongly agree	Agree	Disagree
1.	Positive	3	2	1
2.	Negative	1	2	3

LEVEL OF ATTITUDE

>76% - Highly favourable attitude

51-75 % - Moderately favourable attitude

< 50 % - Unfavourable attitude

VALIDITY & RELIABILITY

Validity is the degree to which an instrument measures what it is intended to measure. ***(Polit and Beck, 2010)***

The validity of the tool was obtained from 5 experts in the field of Nursing and one from the field of medicine . The suggestions and advices given by the experts were considered and duly corrected.

RELIABILITY OF THE TOOL

Reliability denotes the degree of consistency or dependability with which an instrument measures an attribute. ***(Polit and Beck, 2013)***

The reliability of the structured questionnaire was established by using test-retest method. The 'r' value was 0.8. Reliability of the three point Likert scale to assess the attitude was established using split-half method. The 'r' value was 0.8.It was found to be highly reliable. Hence the tool was considered reliable to proceed with the main study.

PILOT STUDY

A pilot study is defined as a small scale version or trial run done in preparation. ***(Hunglre, 2013)***

The pilot study was conducted after receiving permission from the medical officer at kannivadi PHC. The investigator selected 6 samples (3 experimental and 3 control group)from the mothers of toddlers in kannivadi and puddhupatty. The data were analyzed by using inferential and descriptive statistic

DATA COLLECTION PROCEDURE

A formal permission was obtained from the Medical Superintendent kannivadi PHC. The investigator selected 60 samples (30 experimental in Reddiyarpatty and 30 control group in Ammapatty) from the mothers of toddlers, who fulfilled the inclusion criteria using purposive sampling technique. The data for the study was collected within the period of 4 weeks.

Brief information about self and the purpose of the study was explained to the mothers of toddler. They were made to sit comfortably in a well-ventilated area and confidentiality regarding the data was assured so as to get their co-operation during data collection. After getting their verbal consent, data collection was carried out using the structured self- administered questionnaire to assess the knowledge and 3 point Likert scale was used to assess the attitude.

After the completion of the pre test data collection, the mothers of toddlers in the experimental group were gathered and made to sit comfortably. A brief introduction was given about the investigator. The video package on prevention of worm infestation video was given in the form of a video-show. At the end the programme video contents are discussed and doubts of the mothers of toddlers were made clear. After 7 days, post test was conducted by using the same structured self-administered questionnaire and modified Likert scale in the experimental. In the control group pre test was done. Then one week later post test was conducted..

Weeks	Activity	Samples	
		Control group	Experimental group
1st week	Pre test	30 samples	-
2nd week	Post test	30 samples	-
3rd week	Pre test –intervention(Video teaching on prevention of worm infestation	-	30 samples
4th week	Post test	-	30 samples

PLAN FOR DATA ANALYSIS

The statistical method used for analysis was descriptive and inferential statistics. Frequency and percentage distribution were used to describe the demographic data. Mean and standard deviation were used to assess the pre and post test level of knowledge and attitude of the mothers of toddlers were used for descriptive analysis.

Inferential statistics of paired "t" test and unpaired "t" test was used to evaluate the effectiveness of video assisted teaching on prevention of worm infestation among mothers of toddlers. Karl Pearson correlation coefficient 'r' was used to correlate the knowledge and attitude. Chi square test was used to find out the association of knowledge , attitude and their selected demographic variables .

PROTECTION OF HUMAN RIGHTS

The permission for the study was obtained from the Medical Superintendent of the Kannivadi PHC was taken prior to proceed with the conduction of the study.

An informed oral consent was obtained from the respondents after giving proper explanation about the purpose, usefulness and implication of the study to get full cooperation. Assurance was given to all the mothers of toddlers about the confidentiality of their response.

CHAPTER-IV

DATA ANALYSIS AND INTERPRETATION

CHAPTER – IV

DATA ANALYSIS AND INTERPRETATION

This chapter deals with the analysis and interpretation of data related to the effectiveness of video assisted teaching on prevention of worm infestation on knowledge and attitude among mothers of toddlers in selected rural areas at Dindigul district.

Descriptive and inferential statistics were used to analyze the data based on the objectives of the study. The data has been organized and tabulated as follows:

ORGANIZATION OF DATA:

Section I : Data on the demographic variables of the mothers in the experimental and control group.

Section II : Data on the assessment of knowledge and attitude on prevention of worm infestation in the experimental and control group.

Section III : Data on the effectiveness of video assisted teaching on prevention of worm infestation in the experimental group.

Section IV : Data on correlation of knowledge and attitude on prevention of worm infestation in the experimental group.

Section V : Data on the association between knowledge and attitude on prevention of worm infestation and their selected demographic variables.

SECTION I: Data on the demographic variables of mothers of toddlers on prevention of worm infestation

Table 1:- Frequency and percentage distribution of demographic variables of mothers of toddlers in control group and experimental group.

n=30+30

S. No	Demographic variables	Experimental Group		Control Group	
		f	%	f	%
1.	**Age**				
	a) 20-25 years	15	50	13	43.3
	b) 26-30 years	13	43.3	12	40
	c) 31-35 years	2	6.7	5	16.7
2.	**Religion**				
	a) Hindu	14	46.7	14	46.7
	b) Muslim	0	0	0	0
	c) Christian	16	53.3	16	53.3
3.	**Educational status**				
	a) Illiterate	0	0	0	0
	b) Primary education	11	36.7	11	36.7
	c) Secondary education	12	40	9	30
	d) Higher secondary	7	23.3	10	33.3
4.	**Occupational status**				
	a) House wife	8	26.7	9	30
	b) Agriculture	6	20	6	20
	c) Private employee	7	23.3	7	23.3
	d)Government employee	9	30	8	26.7

5.	**Monthly income of family**				
	a) Less than Rs.5000	4	13.3	5	16.7
	b) Rs.5000-10000	14	47.3	15	50
	c) Rs.11000-15000	9	30	9	30
	d) Above Rs.15000	1	3.3	1	3.3
6.	**place of defecation:**				
	a) Open field defecation	23	76.7	24	80
	b) Latrine	7	23.3	6	20
7.	**Source of drinking water:**				
	a) Tap water	18	59.4	22	73.3
	b) River water	0	0	0	0
	c) Well water	12	39.6	9	30
8.	**Source of health information**				
	a) Health workers	13	43.3	22	73.3
	b) Family and peer group	9	30	0	0
	c) Mass media	8	26.7	8	26.7

CONTROL GROUP

Table 1 shows that in the control group, with regards to **age** 13(43.3%) mothers were 20-25 years, 12(40%) were belongs to 26-30 years, 5(16.7%)and were belongs to 31-35 years .

Regarding **religion** 14(46.7%) were Hindus, were 16(53.3%) Christian and were none them are Muslims

Regarding **education,** none of them were illiterate, 11(36.7%) of them had primary school education, 9(30%) of them had secondary education, and 10(33.3%) of them had higher secondary education and above.

With regards to **occupation** 9(30%) were housewives, 6(20%) were Agriculture workers (23.3%) were private employees and 8(26.7%) were government employees

About **monthly income** 5(16.7%) were less than Rs. 5000, 15(50%) were Rs.5000-10,000, 9(30%) were Rs.11,000-15,000 and 1(1%) had above Rs.15000 income.

Regarding **place of defecation** 24(80%) were practicing open air defecation and 6(20%) were using latrine.

Regarding **source of drinking water** 22(73.3%) were drinking tape water, none of them drinking river water and 9(26.7%) were drinking well water.

With regard to **source of information** 22(73.3%) were received from health workers, none of the mothers received information from the family and peer group, and 8(26.7%) received from mass media.

EXPERIMENTAL GROUP

In the experimental group, with regards to **age** 15(50%) mothers were 20-25 years, 13(43.3%) were belongs to 26-30 years, 2(6.7%)and were belongs to 31-35 years .

Regarding **religion** 14(46.7%) were Hindus, were 16(53.3%) Christian and were none of them are Muslims

Regarding **education**, none of them were illiterate, 11(36.7%) of them had primary school education, 12(40%) of them had secondary education, and 7(23.3%) of them had higher secondary education and above.

With regards to **occupation** 8(26.7%) were housewives, 6(20%) were Agriculture workers (23.3%) were private employees and 9(30%) were government employees.

About **monthly income** 4(13.3%) were less than Rs. 5000, 14(47.3%) were Rs.5000-10,000, 9(30%) were Rs.11, 000-15,000 and 1(1%) had above Rs.15000 income.

Regarding **place of defecation** 23(76.7%) were practicing open air defecation and 7(23.3%) were using latrine.

Regarding **source of drinking water** 18(59.4%) were drinking tape water, none of them drinking river water and 12 (39.6%) were drinking well water.

With regard to **source of information** 13(43.3%) were received from health workers, 9(30%) mothers received information from the family and peer group, and 8(26.7%) received from mass media.

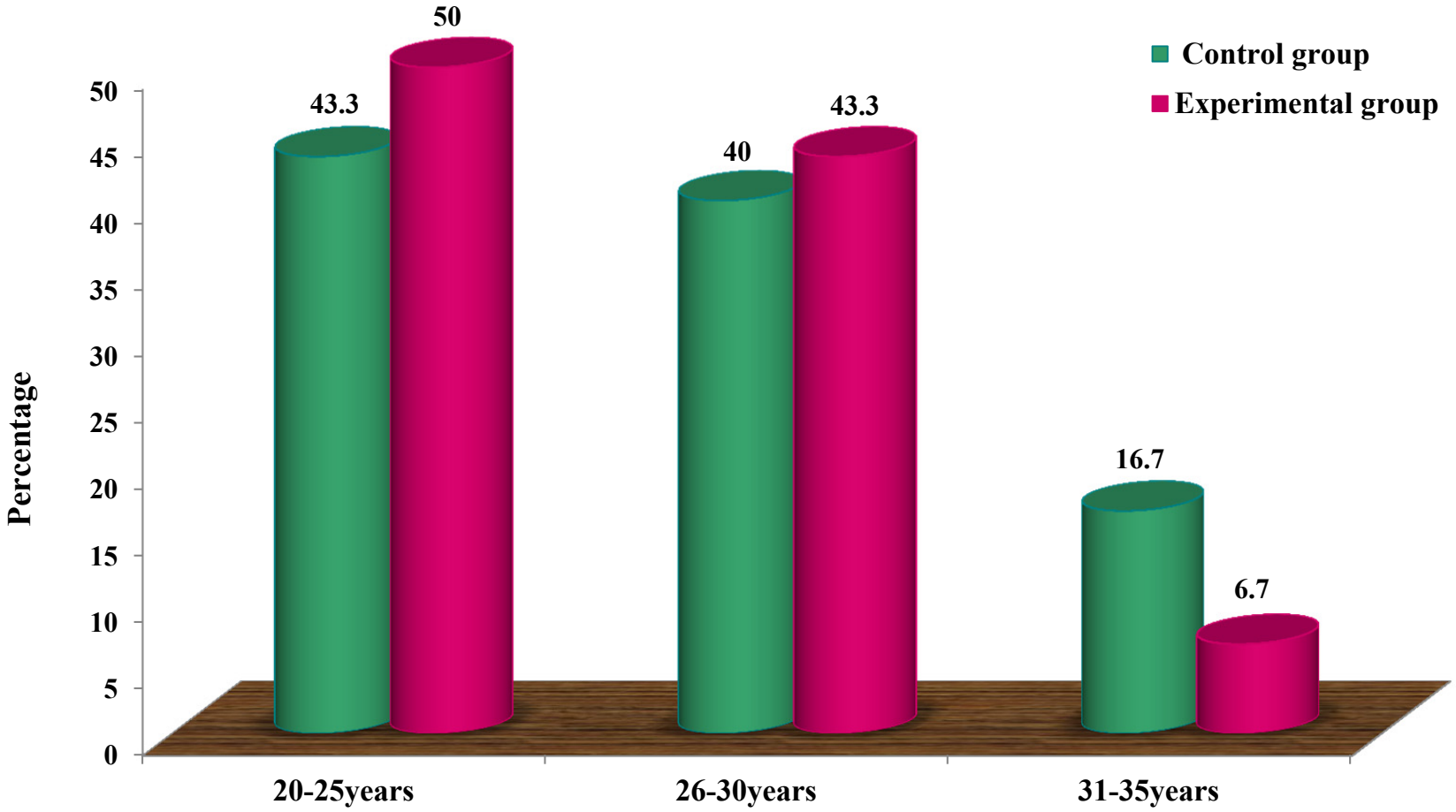


Figure :3-Distribution of subjects based on their age in control group and experimental group.

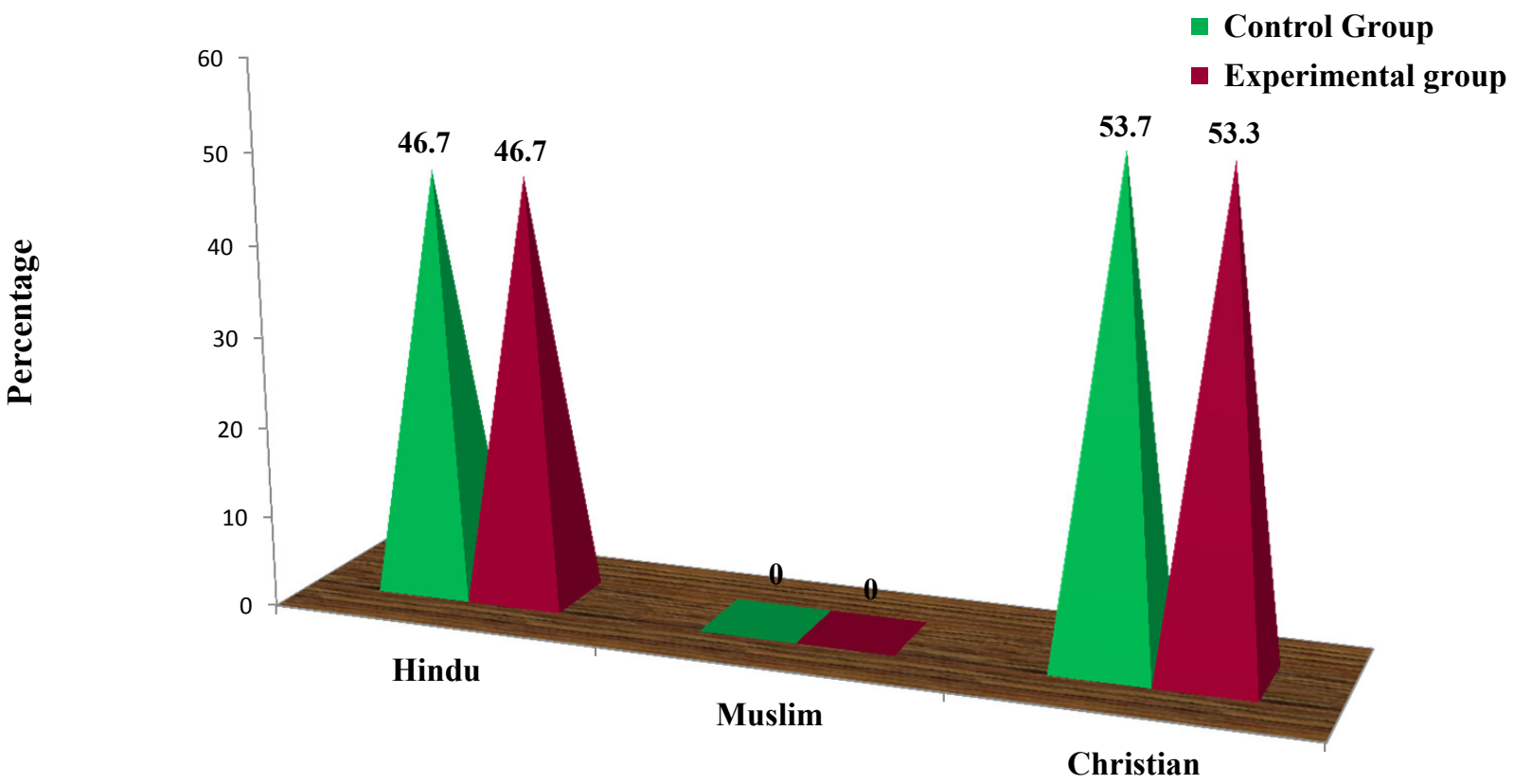


Figure:4- Distribution of subjects based on the religion in control and experimental group.

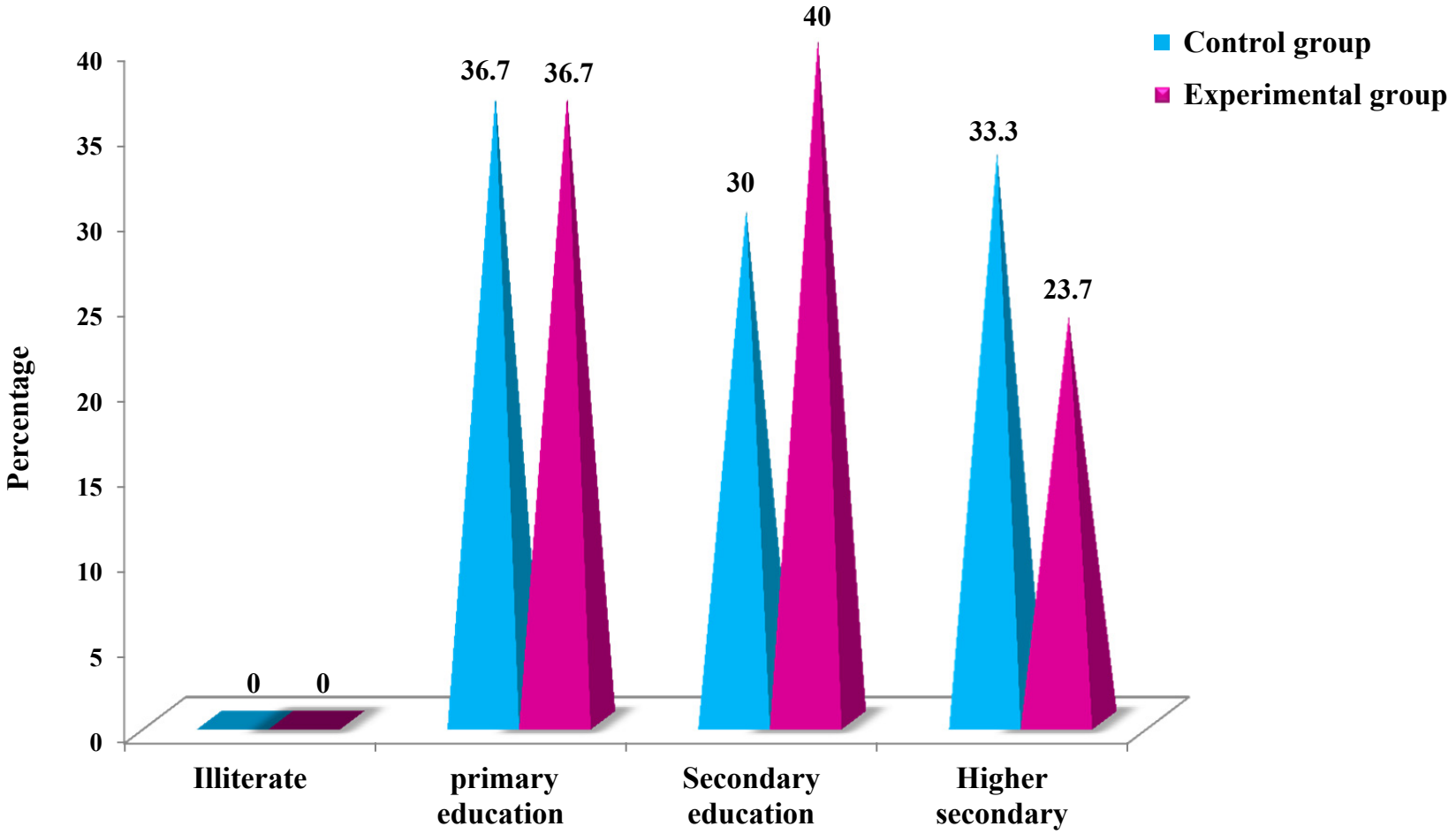


Figure:5 Distribution of subjects based on their educational status in control group and experimental group.

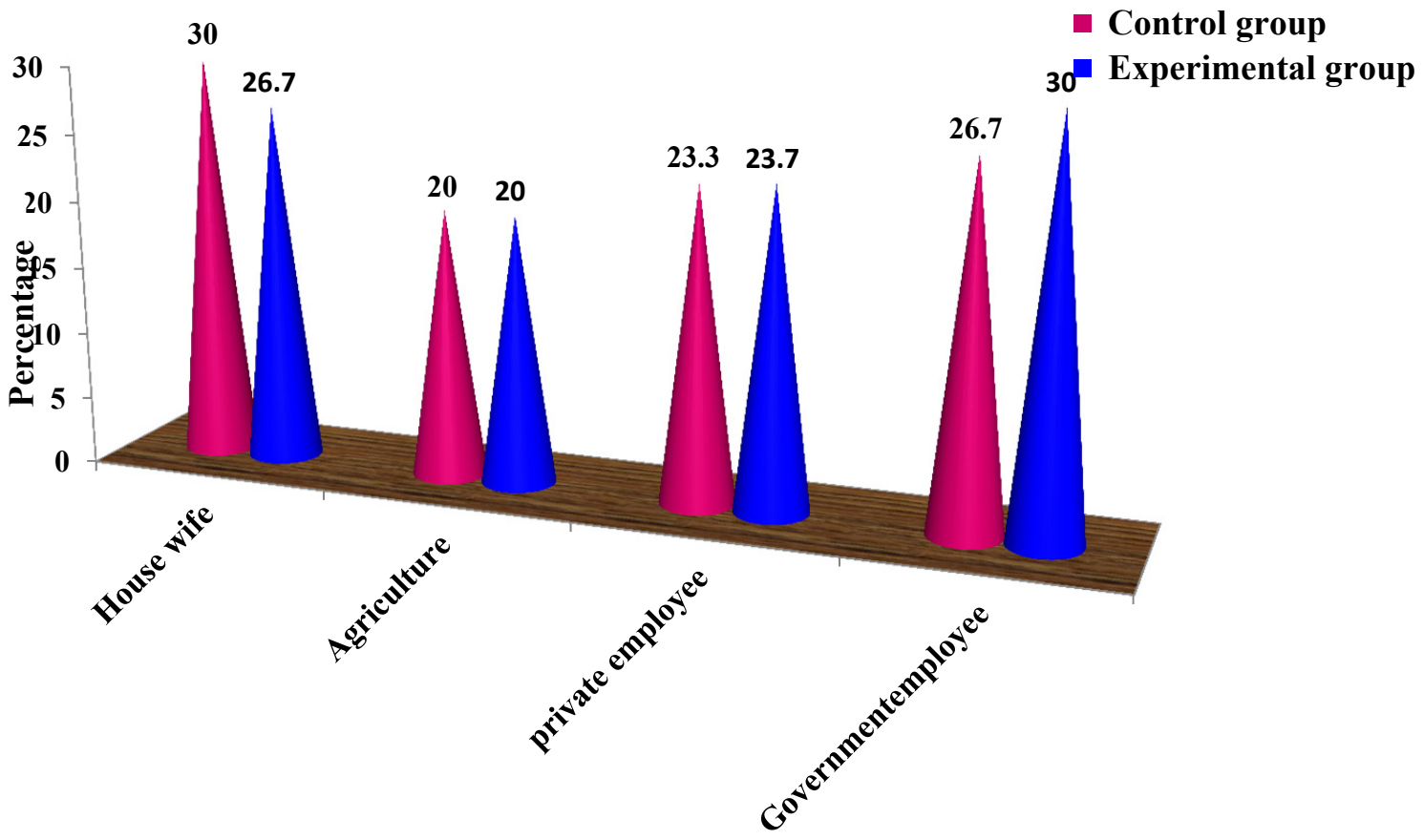


Figure:6-Distribution of subjects based on their occupational status in control and experimental group

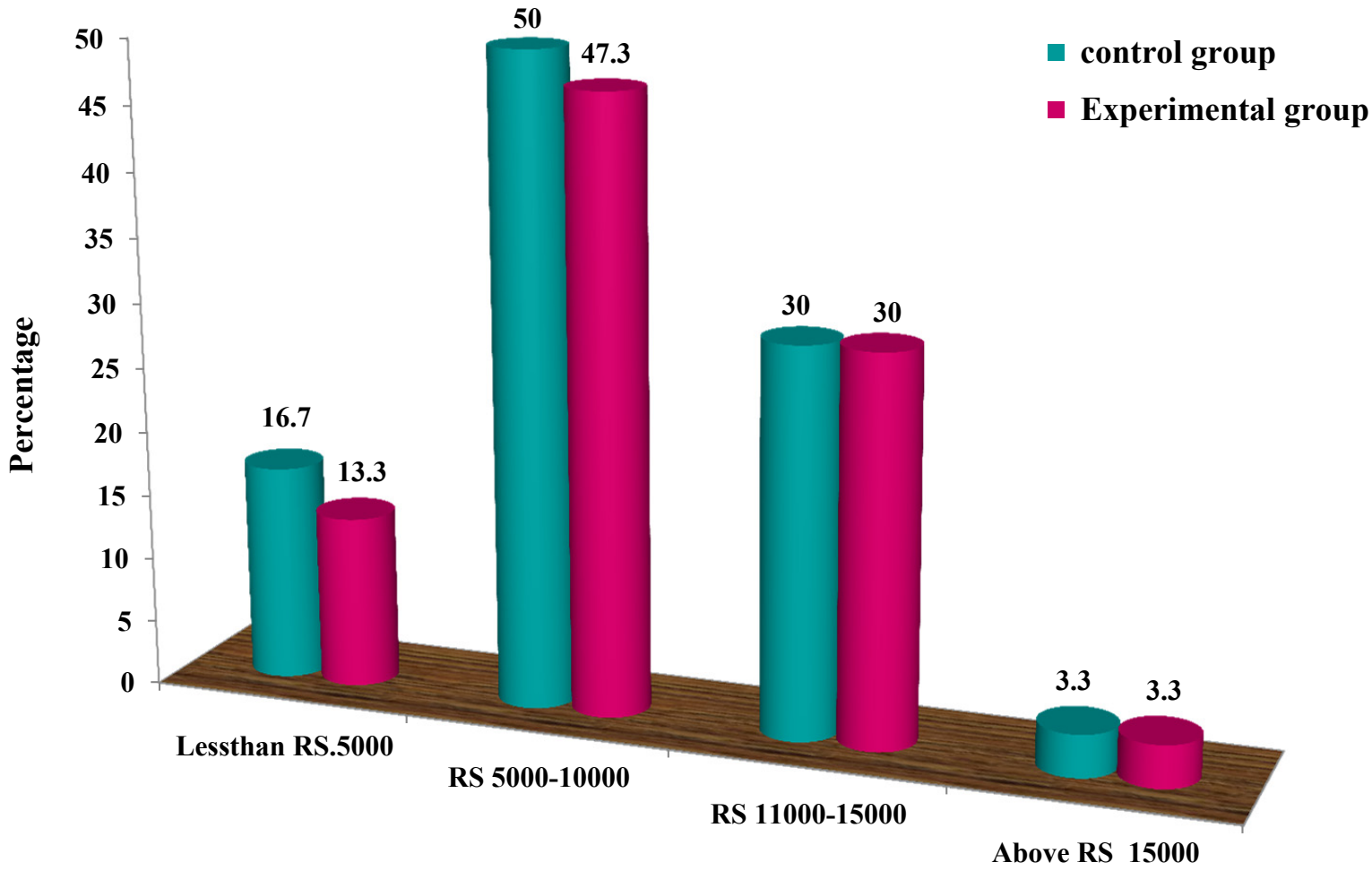


Figure:7-Distrbution of subjects based on their monthly income of the family.

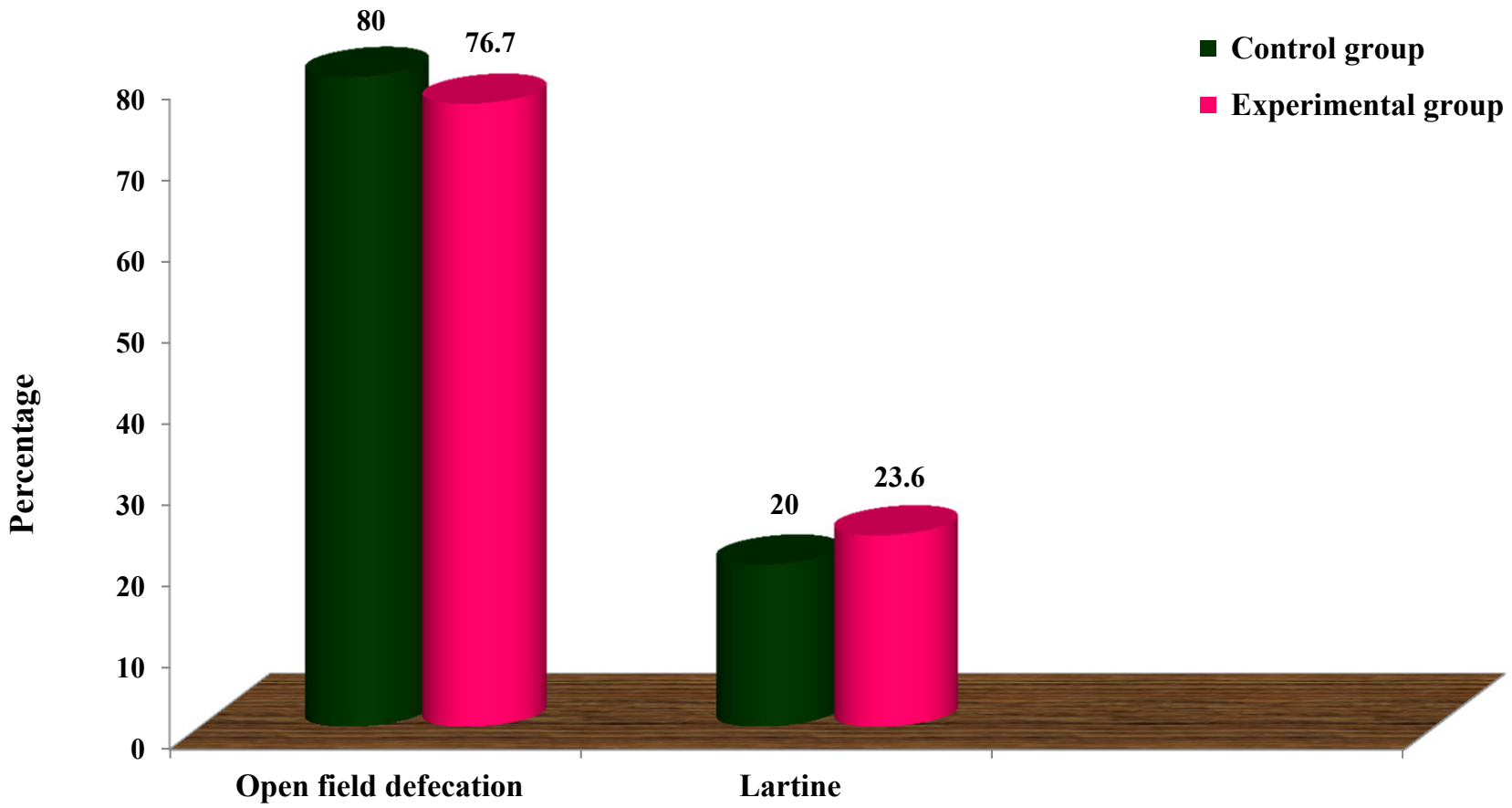


Figure:8-Distribution of subjects based on their place of defecation in control and experimental group.

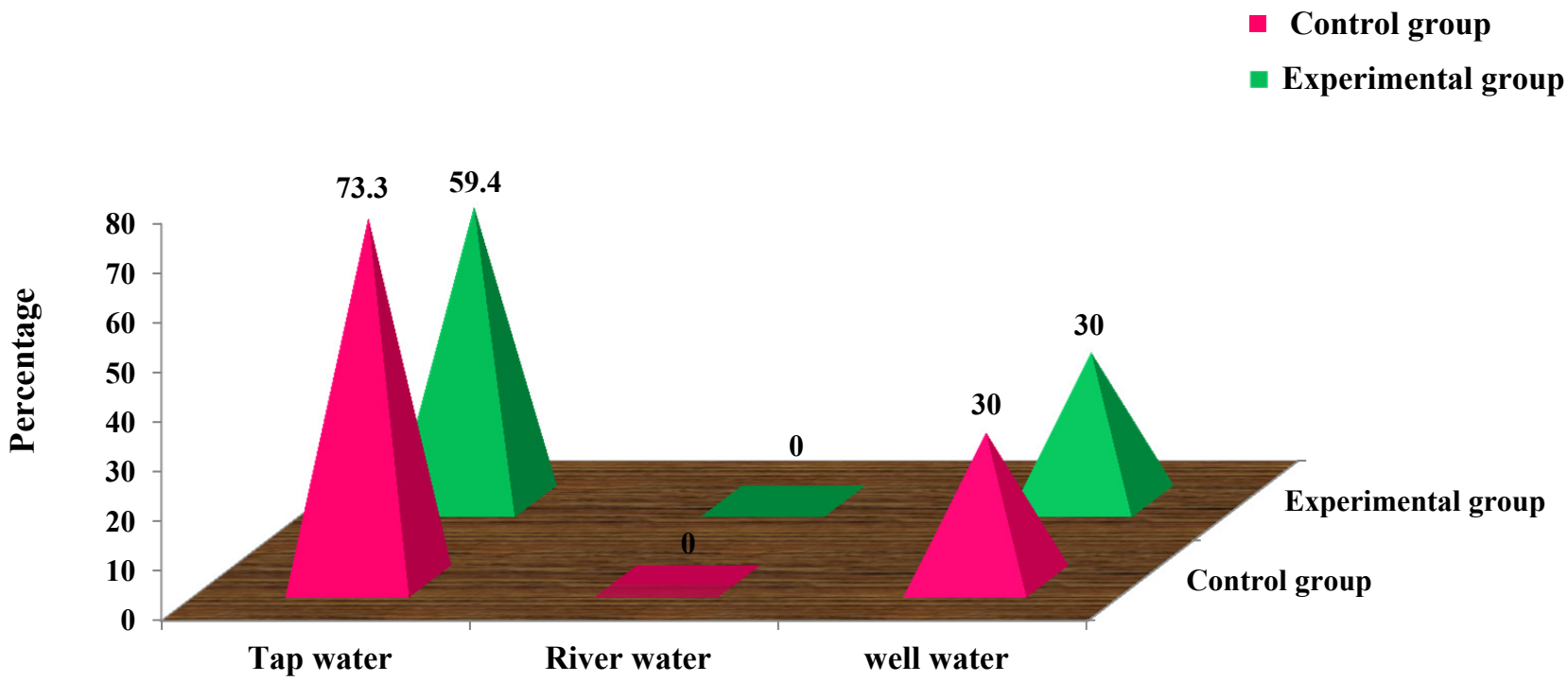


Figure:9-Distribution of subject based on their source of drinking water in control and experimental group.

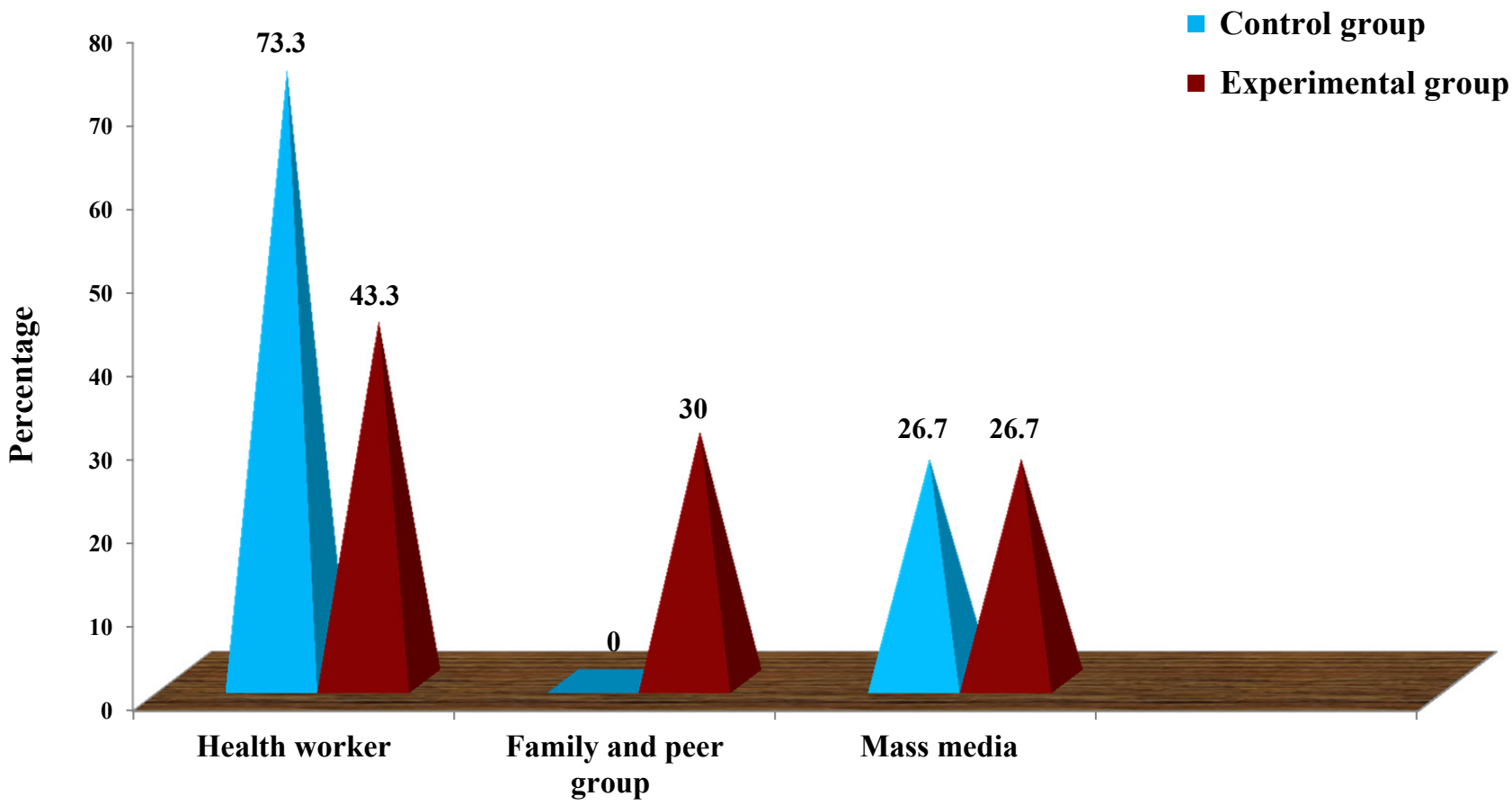


Figure:10-Distribution of subject based on their source of health information.

SECTION- II: Data on the level of knowledge on prevention of worm infestation in the experimental and control group.

Table 2.1- Frequency and percentage distribution of level of knowledge among mothers of toddlers on prevention of worm infestation in control and experimental group.

n=30+30

Level of knowledge	Control group				Experimental group			
	Pre test		Post test		Pre test		Post test	
	f	%	f	%	f	%	f	%
Inadequate	22	73.3	22	73.3	23	76.7	-	-
Moderate	8	26.7	8	26.7	7	23.3	3	10
Adequate	-	-	-	-	-	-	27	90

The above table2.1 shows that in control group were 22(73.3%) mothers had inadequate knowledge, 8(26.7%) mothers had moderately adequate knowledge and none of them had adequate knowledge in the pre-test and there was no change in the post level .In the experimental group, which showed 23(76.7%) mothers had inadequate knowledge, 7(23.3%) mothers had moderately adequate knowledge and none of them had adequate knowledge in pre-test. In post test 3(10%) mothers had moderately adequate knowledge, 27(90%) mothers had adequate knowledge and none of them had inadequate knowledge. From the above findings it was inferred that the video assisted teaching improved the level of knowledge of mothers of toddlers in the experimental group in the post test.

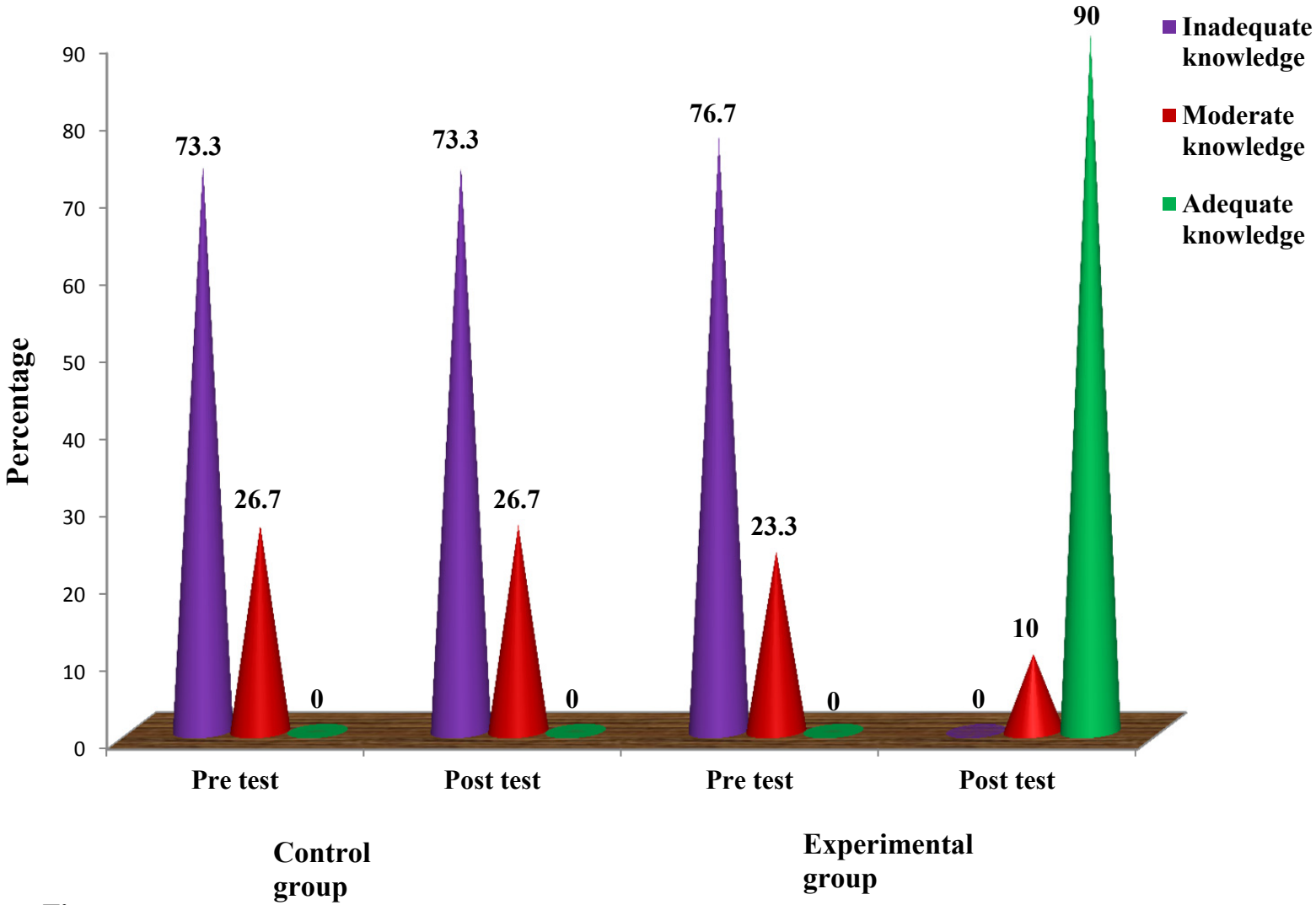


Figure: 11-Distribution of subjects based on the level of knowledge on prevention of worm infestation in control and experimental group.

Table 2.2- Frequency and percentage distribution of level of attitude of mothers of toddlers on prevention of worm infestation in control and experimental group. n=30+30

Level of Attitude	Control group				Experimental group			
	Pre test		Post test		Pre test		Post test	
	f	%	f	%	f	%	f	%
Unfavourable attitude	25	83	24	82	17	56.7	-	-
Moderately favourable attitude	5	17	6	18	13	43.3	2	6.7
Favourable attitude	-	-	-	-	-	-	28	93.3

Table 2.2 showed that revealed that 25(83%) of the mothers had unfavourable attitude, 5(17%) of the mothers had moderately favourable attitude and none of the mothers had favourable attitude in pre test. In post-test 24 (82%) of the mothers had unfavourable attitude ,6(18%) of the mothers had moderately favourable attitude and none of the mothers had favourable attitude In experimental group 17(56.7%) mothers had unfavourable attitude, 13 (43.3%)mothers had moderately favourable attitude and none of them had favourable attitude in pre test .In post test 28(93.3%) mother had favourable attitude, 2(6.7%) mothers had moderately favourable attitude and none of them had unfavourable attitude. Thus with the above findings it was inferred that the video assisted teaching was highly effective to impart favourable attitude prevention of worm infestation.

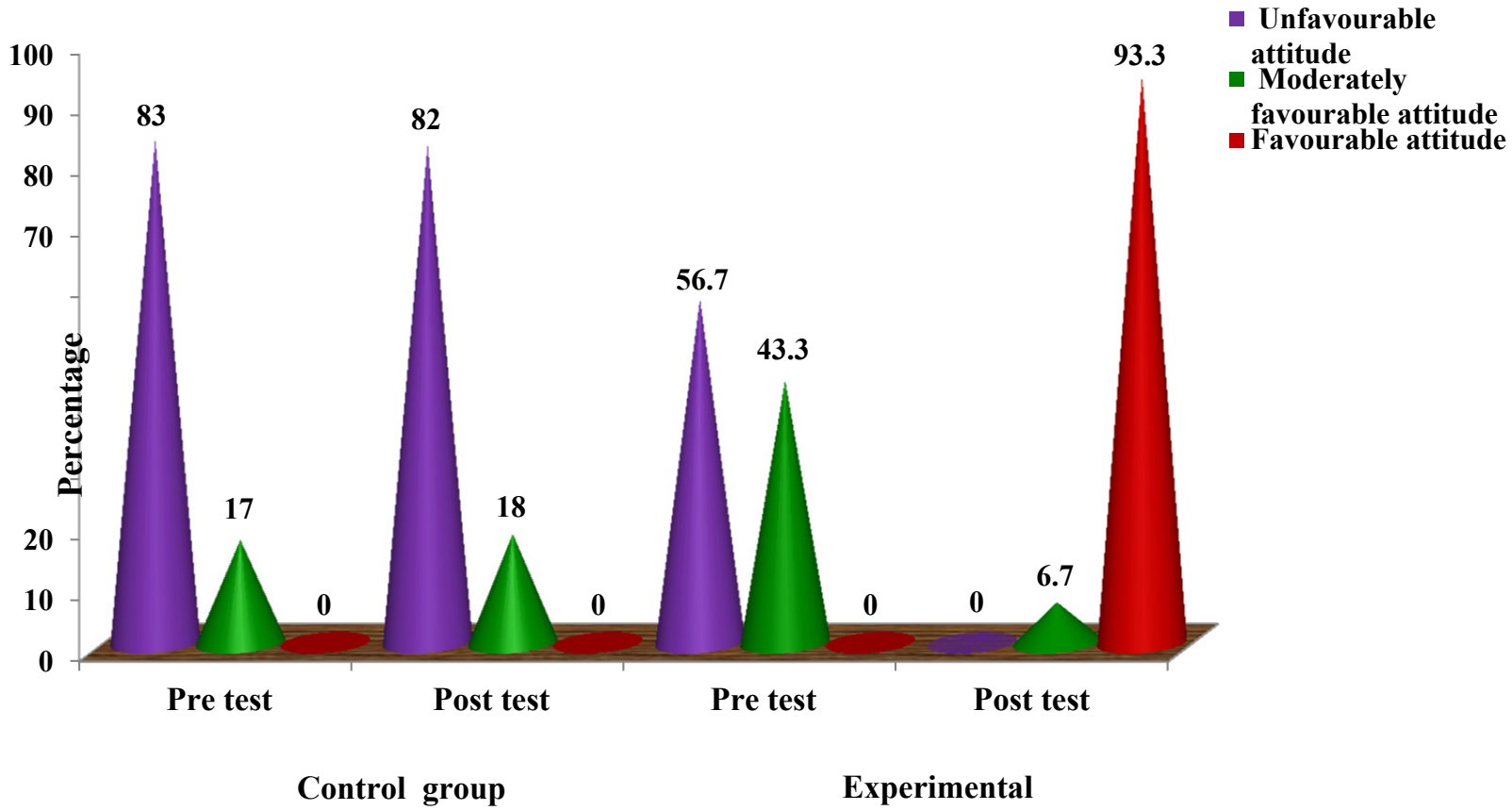


Figure:12-Distribution of subjects based on the level of attitude on prevention of worm infestation in control and experimental group.

SECTION- III

Data on the effectiveness of video assisted teaching on prevention of worm infestation in the experimental group

Table 3.1: Mean, SD and 't' value of the level of knowledge on prevention of worm infestation in experimental group.

n=30

Level of Knowledge	Experimental group		t-value
	Mean	SD	
Pre test	45.50	12.07	t = 16.17***
Post test	82.35	7.09	

Significant at ***p<0.001

Table 3.1 revealed the mean pre test level of knowledge score was 45.50 and SD was 12.07 and mean post test score was 82.35 and SD was 7.09. The calculated 't' value was 16.17 which was significant at the level of p<0.001. Thus it was concluded that the video assisted teaching was highly effective in improving the level knowledge of the mothers of toddlers about prevention of worm infestation.

Table 3.2: Mean, SD and 't' value of the level of attitude prevention of worm infestation in the experimental group.

n=30

Level of Attitude	Experimental group		t-value
	Mean	SD	
Pre test	70.99	12.04	t = 5.90**
Post test	86.67	7.03	

Significant at **p <0.01

Table 3.2 revealed that the mean pre test level of attitude score was 70.99 and SD was 12.04 and the mean post test score was 86.67 and SD was 7.03 in post test in the experimental group. The calculated 't' value was 5.90 which was significant at the level of $p<0.01$. Thus with the above findings it was inferred that the video teaching was highly effective to impart favourable attitude to the mothers of toddlers about prevention of worm infestation .

Table 3.3: Mean, SD and 't' value of the level of attitude on prevention of worm infestation in the experimental and control group. n=30+30

Variables	Experimental group		Control group		Student unpaired "t" tests
	Mean	SD	Mean	SD	
Level of Knowledge	82.35	7.09	57.1	7.36	t =15.06***
Level of Attitude	86.67	7.03	67.78	10.1	t =8.43***

Significant at ***p<0.001

Table 3.3 revealed that **t**he mean post test knowledge scores in the experimental group was 82.35 and SD was 7.09 and in the control group mean score was 57.1 and the SD score was 7.36.The calculated "t" value was 15.06which was significant at P<0.001 level. The mean post test attitude scores in the experimental group was 86.67 and SD was 7.03 and in the control group mean score was 67.78 and SD was 10.1. The calculated "t" value was 8.43 which was significant at P<0.001 level. Thus with the above findings it was inferred that the video assisted teaching was highly effective in improving the level of knowledge and attitude of mothers of toddlers in the experimental group.

SECTION -IV

Table 4 : Data on the correlation between the level of knowledge and attitude on prevention of worm infestation in the experimental group.

n = 30

Variables	Experimental group		r-value
	Mean	SD	
Level of Knowledge	82.35	7.09	0.1767
Level of Attitude	86.67	7.03	

***p<0.001,

Table 4 revealed that the correlation value of knowledge and attitude among mothers of toddlers were r = 0.1767 which was significant at level of p<0.001. Thus it was inferred that there is a positive correlation between the level of knowledge and attitude of mothers of toddlers on the prevention of worm infestation in the experimental group.

SECTION-V

Table-5.1: Data on the association of the level of knowledge on prevention of worm infestation among mothers of toddlers and their selected demographic variables in the experimental group.

n=30

Sl. No	Demographic variables	Inadequate		Moderately adequate		adequate		χ^2
		f	%	f	%	f	%	
1.	**Age(in years):**							
	a) 20-25 years	-		3	10	11	36.7	NS
	b) 26-30 years	-		-	-	8	26.7	5.43
	c) 31-35 years	-		-	-	8	26.7	
2.	**Religion:**							
	a) Hindu	-	-	2	6.7	13	43	NS
	b) Muslim	-	-	-	-	-	-	0.03
	c) Christian	-	-	1	3.3	14	46.2	
3.	**Educational status:**							
	a) Illiterate	-	-	-	-	-	-	NS
	b) Primary education	-	-	3	10	3	10	3.10
	c) Secondary education	-	-	-	-	6	20	
	d) Higher secondary	-	-	-	-	18	59.4	
4.	**Occupational status:**							
	a) House wife	-	-	3	10	5	16.7	NS
	b) Agriculture	-	-	-	-	4	13.3	7.83
	c) Private employee	-	-	-	-	11	36.7	
	d) Government employee	-	-	-	-	7	23.3	
5.	**Monthly income of family :**							
	a) Less than Rs.5000	-	-	1	3.3	8	26.7	NS
	b) Rs.5000-10000	-	-	-	-	8	26.7	2.49
	c) Rs.11000-15000	-	-	2	6.7	6	20	
	d) Above Rs.1500	-	-	-	-	5	16.7	

6.	**Place of defecation:**							
	a) Open field defecation	-	-	2	6.7	20	66	S
	b) Latrine	-	-	1	3.3	7	23.3	13.52
7.	**Source of drinking water:**							
	a) Tap water	-	-	2	26.7	16	26.7	NS
	b) River water	-	-	-	-	-	-	2.85
	c) Well water	-	-	1	3.3	11	36.7	
8.	**Source of health information :**							
	a) Health workers	-	-			10	33	NS
	b) Family and peer group	-	-	3	10	8	26.4	4.13
	c) Mass media	-	-			9	29.7	

*-P<0.05, Significant; NS-Non Significant; S- Significant

Table 5.1 revealed that there was statistically significant association at level of P<0.05 between the knowledge of the mothers of toddlers on prevention of worm infestation and place of defecation in the experimental group. There was no statistical significant association between the level of knowledge of mothers of toddlers on prevention of worm infestation and other selected demographic variables such as age, religion, educational status ,occupation, monthly income, source of drinking water, and source of health information in the experimental group.

Table-5.2: Association of the level of attitude regarding prevention of worm infestation among mothers of toddlers and their selected demographic variables in the experimental group.

n=30

Sl. No	Demographic variables	Inadequate		Moderately adequate		Highly adequate		χ^2
		f	%	f	%	f	%	
1.	**Age(in years):**							
	a) 20-25 years	-	-	3	10	12	40	NS
	b) 26-30 years	-	-	1	3.3	12	40	2.47
	c) 31-35 years	-	-	1	3.3	2	6.7	
2.	**Religion:**							
	a) Hindu	-	-	2	6.7	13	43.3	NS
	b) Muslim	-	-	-	-	-	-	1.71
	c) Christian	-	-		-	15	49.5	
3.	**Educational status:**							
	a) Illiterate	-	-	-	-	-	-	NS
	b) Primary education	-	-	2	6.7	9	30	0.05
	c) Secondary education	-	-	-	-	10	33.3	
	d) Higher secondary	-	-	-	-	9	30	
4.	**Occupational status:**							
	a) House wife	-	-	1	3.3	10	33.3	NS
	b) Agriculture	-	-	1	3.3	5	16.7	1.11
	c) Private employee	-	-	-	-	5	16.7	
	d) Government employee	-	-	-	-	8	26.7	
5.	**Monthly income of family :**							
	a) Less than Rs.5000	-	-	-	-	8	26.7	S
	b) Rs.5000-10000	-	-	1	3.3	14	46.7	8.88
	c) Rs.11000-15000	-	-	-	-	6	20	
	d) Above Rs.15000	-	-	1	3.3	-	-	

6.	**Place of defecation:**							NS
	a. Open field defecation	-	-	2	6.7	19	63.3	0.03
	b. Latrine	-	-	-		9	30	
7.	**Source of drinking water:**							
	a) Tap water	-	-	1	3.3	13	43.3	NS
	b) River water	-	-	-	-	4	13.2	2.18
	c) Well water	-	-	1	3.3	11	36.3	
8.	**Source of health**							
	information :	-	-	-	-	8	26.7	NS
	a) Health workers	-	-	2	6.7	12	39.6	6
	b) Family and peer group	-	-	-	-	8	26.7	
	c) Mass media							

*-P<0.05, Significant; NS-Non Significant; S- Significant

Table 5.3 revealed that there was statistically significant association at level of P<0.05 between the attitude of the mothers of toddlers on prevention of worm infestation and monthly income in the experimental group. There was no statistical significant association between the level of attitude of mothers of toddlers on prevention of worm infestation and other selected demographic variables such as age, religion, educational status ,occupation, place of defecation , source of drinking water, and source of health information in the experimental group.

Table 5.3: Association of knowledge on prevention of worm infestation among mothers of toddlers and their selected demographic variables in the control group.

n=30

Sl. NO	Demographic variables	Inadequate		Moderately adequate		Adequate		
		f	%	F	%	f	%	χ^2
1.	**Age(in years):**							NS
	a) 20-25 years	13	43.3	-	-	-	-	5.78
	b) 26-30 years	4	13.2	8	26.4	-	-	
	c) 31-35 years	5	16.7	-	-	-	-	
2.	**Religion:**							NS
	a) Hindu	6	19.8	6	19.8	-	-	10.94
	b) Muslim	-	-	-	-	-	-	
	c) Christian	16	43.3	2	6.7	-	-	
3.	**Educational status:**							NS
	a) Illiterate	-	-	-	-	-	-	1.85
	b) Primary education	8	26.7	3	10	-	-	
	c) Secondary education	9	30	4	13.2	-	-	
	d) Higher secondary	5	16.7	1	3.3	-	-	
4.	**Occupational status:**							NS
	a) House wife	3	10	2	6.7	-	-	5.48
	b) Agriculture	6	20	4	13.2	-	-	
	c) Private employee	7	23.3	1	3.3	-	-	
	d) Government employee	6	20	1	3.3	-	-	
5.	**Monthly income of family :**							NS
	a) Less than Rs.5000	2	6.7	1	3.3	-	-	0.075
	b) Rs.5000-10000	10	33	7	23.1	-	-	
	c) Rs.11000-15000	9	30		-	-	-	
	d) Above Rs.15000	1	3.3	-	-	-	-	
6.	**place of defecation:**							NS
	a) Open field defecation	14	46.2	4	13.2	-	-	10.94
	b) Latrine	8	26.7	4	13.2	-	-	
7.	**Source of drinking water:**							NS
	a) Tap water	12	39.6	5	16.7	-	-	7.77
	b) River water	-	-	-	-	-	-	
	c) Well water	10	33	3	10	-	-	
8.	**Source of health information :**							NS
	a) Health workers	21	69.3	6	20	-	-	6.6
	b) Family and peer group	-	-	-	-	-	-	
	c) Mass media	1	3.3	2	6.7	-	-	

*-P<0.05, Significant; NS-Non Significant; S- Significant

Table 5.3 revealed that there was no statistical significant association at the level of $P<0.05$ between the level of knowledge of the mothers of toddlers on prevention of worm infestation and their selected demographic variables like age, religion, education, occupation, monthly income, place of defecation and source of health information in the control group.

Hence with the above findings it can be inferred that there was no association between the knowledge of that mothers of toddlers on prevention of worm infestation and their selected demographic variables in the control group.

Table-5.4 Association of the level of attitude on prevention of worm infestation among mothers of toddlers and their selected demographic variables in the control group.

Sl. No	Demographic variables	Inadequate		Moderately adequate		Highly adequate		χ^2
		f	%	f	%	f	%	
1.	**Age(in years)**							
	a) 20-25 years	11	36.3	-	-	-	-	NS
	b) 26-30 years	12	40	3	10	-	-	8.88
	c) 31-35 years	1	16.7	3	10	-	-	
2.	**Religion**							
	a) Hindu	12	39.6	5	16.5	-	-	NS
	b) Muslim	-	-	-	-	-	-	7.74
	c) Christian	12	39.6	1	3.3	-	-	
3.	**Educational status**							
	a) Illiterate	-	-	-	-	-	-	NS
	b) Primary education	10	33	3	10	-	-	9.64
	c) Secondary education	4	13.2	2	6.7	-	-	
	d) Higher secondary	10	33	1	3.3	-	-	
4.	**Occupational status**							
	a) House wife	9	30	1	3.3	-	-	NS
	b) Agriculture	3	10	1	3.3	-	-	9.95
	c) Private employee	4	13.2	4	13.2	-	-	
	d) Government employee	8	26.7	-	-	-	-	
5.	**Monthly income of family**							
	a) Less than Rs.5000	5	16.7	5	16.7	-	-	NS
	b) Rs.5000-10000	15	50	1	3.3	-	-	4.890
	c) Rs.11000-15000	3	10	-	-	-	-	
	d) Above Rs.15000	1	3.3	-	-	-	-	

6.	**place of defecation**							
	a) Open field defecation	22	73.3	4	13.2	-	-	NS
	b) Latrine	2	6.7	2	6.7	-	-	3.34
7.	**Source of drinking water**							
	a) Tap water	20	66		-	-	-	NS
	b) River water	-	-	-	-	-	-	1.37
	c) Well water	4	13.2	-	-	-	-	
8.	**Source of health information**							
	a) Health workers	18	59.4	3	10	-	-	NS
	b) Family and peer group	-	-	-	-	-	-	1.02S
	c) Mass media	6	19.8	3	10	-	-	

*-P<0.05, Significant; NS-Non Significant; S- Significant

Table 5.4 revealed that there was no statistical significant association at the level of P<0.05 between the level of attitude of the mothers of toddlers on prevention of worm infestation and their selected demographic variables like age, religion, education, occupation, monthly income, place of defecation and source of health information in the control group.

Hence with the above findings it can be inferred that there was no association between the attitude of that mothers of toddlers on prevention of worm infestation and their selected demographic variables in the control group.

CHAPTER-V

DISCUSSION

CHAPTER – V
DISCUSSION

This chapter discusses about the findings of the study derived from the statistical analysis and its pertinence to the objectives set for the study and the related literature.

The findings of the study based on the objectives were:

The first objective was to assess the pre and post test level of knowledge and attitude on prevention of worm infestation among mothers of toddlers in control and experimental group

The findings of the study revealed that in the experimental group 23(76.7%) mothers of toddlers had inadequate knowledge, 7(23.3%) of the mothers had moderately adequate knowledge and none of them had adequate knowledge in the pre-test. In the post test findings majority of the mothers 27 (90%) had adequate knowledge, 3(10%) of the mothers had moderately adequate knowledge and none of the mothers had inadequate knowledge. This showed that the mothers had improved knowledge on prevention of worm infestation in the post test.

In case of the level of attitude 17(56.7%) mothers had unfavourable attitude, 13(43.3%) of the mothers had moderately favourable attitude and none of the mothers had highly favourable attitude in the pre test experimental group. In post test none of the mothers had unfavourable attitude, 2 (6.7%) of the mothers had moderately favourable attitude and 28 (93.3%) of the mothers had favourable attitude. This showed that the mothers had better attitude on prevention of worm infestation in the post test.

The findings of the study revealed that in the control group the pre test findings were 22(73.3%) mothers had inadequate knowledge, 8(26.7%) mothers had moderately adequate knowledge and none of the mothers had adequate knowledge. In post test findings majority of the mothers 22(73.3%) had adequate knowledge, 8(26.7%) had moderately adequate knowledge and none of the mothers had adequate knowledge. This showed that the mothers had no improved knowledge on prevention of worm infestation in the pre and post test in the control group.

In case of attitude in the control group 25(83%) mothers had unfavourable attitude, 5(17%) mothers had moderately favourable attitude and none of the mothers had highly favourable attitude in the pre test. In post test 24(82%) mothers had unfavourable attitude, 6 (18%) mothers had moderately favourable attitude and none of the mothers had favourable attitude. This showed that the mothers had no change in attitude on prevention of worm infestation in the control group.

Eliza (2013) conducted a descriptive study to assess the knowledge, attitude and practices of worm infestation among mothers of toddlers in Nepal. Totally 60 mothers were included. The study revealed that one third of the mothers 40%, lacked basic and essential knowledge about worm infestation, 57% of the mothers had lower attitude.

The second objective was to evaluate the effectiveness of video assisted teaching on knowledge and attitude on prevention of worm infestation among mothers of toddlers in experimental group.

The mean pre test knowledge score was 45.50 and SD score was 12.07 and mean post test score was 82.35 and the SD score was 7.09. The calculated 't' value was 16.17 which was significant at $p<0.001$ level.

The mean pre test attitude score in the experimental group of mothers of toddlers was 70.99 and the SD score was 12.04 and mean post test score was 86.67 and the SD score was 7.03. The calculated 't' value was 5.90 significant at $p<0.001$ level.

The mean post test knowledge scores in the experimental group was 82.35 and the SD score was 7.09 and in the control group, mean score was 57.1 and the SD score was 7.36.The calculated "t" value was 16.17 significant at $p<0.001$ level.

The mean post-test attitude scores in the experimental group was 86.67 with SD 7.03 and in the control group was 67.78 with SD 10.1. The calculated "t" value was 8.43significant at $p<0.001$ level.

Thus it can be concluded that the video assisted teaching was highly effective in improving the knowledge and attitude of the mothers of toddlers about prevention of worm infestation in the experiment group.

The findings were consistent with the study conducted by Max M(2012)to evaluate the effectiveness of STP. The researcher found that mothers who attended the prevention of worm infestation education classes had a positive attitude towards prevention of worm infestation which improved from an attitude level of 40% to 89% among mothers who attended the education programme.

The third objective was to correlate the knowledge and attitude on prevention of worm infestation among mothers of toddlers

The analysis revealed that there was a positive correlation between the overall mean improvement level of knowledge and attitude of the mothers of toddlers in the experimental group ($r = 0.1767$) which was significant at the level of $p <0.01$. Hence there is significant relationship between the overall mean improvement level of

knowledge and attitude of mothers of toddlers on prevention of worm infestation among the experimental group. This showed that if the knowledge increased the attitude also improved.

This finding was consistent with the study conducted by Henderson, G. (2010) on the assessment of knowledge and attitude on worm infestation among mothers of toddlers. The analysis revealed that there was a positive correlation between knowledge and attitude r =0.29, which is significant at p<0.05 level.

The fourth objective was to determine the association between knowledge and attitude on prevention of worm infestation and their selected demographic variables.

There was statistically significant association at P<0.05 level between the levels of knowledge of the mothers of toddlers on prevention of worm infestation and the place of defecation in the experimental group. There was no statistically significant association at level of P<0.05 between the knowledge of the mothers of toddlers on prevention of worm infestation and their selected demographic variables in the control group.

Hence it can be concluded that there is association between the knowledge of the mothers of toddlers on prevention of worm infestation and their selected demographic variables in the experimental group.

Sharma Gautam (2013) conducted a study to assess the health and welfare status and rights of toddlers of age 1-3 years in slums of Agra city. Baseline information revealed that the health and living standards of children, socio-economic and educational profiles were very low and mortality and morbidity was very high. Personal hygiene was poor in 73%of children, nails were not trimmed in, 75% took bath irregularly, in 85% teeth was dirty and showed poor personal hygiene was

predisposing to gastrointestinal and parasitic disorders. There was statistically significant association at level of $P<0.05$ between parasitic disorders and their demographic variables

There was statistically significant association at level of $P<0.05$ between the attitude of the mothers of toddlers on prevention of worm infestation and the monthly income in the experimental group .There was no statistically significant association at the level of $P<0.05$ between the attitude of the mothers of toddlers on prevention of worm infestation and their selected demographic variables in the control group.

Hence we can conclude that there is association between the attitude of the mothers of toddlers on prevention of worm infestation and their selected demographic variables in the experimental group.

CHAPTER-VI

SUMMARY

AND

RECOMMENDATIONS

CHAPTER – VI

SUMMARY AND RECOMMENDATIONS

This chapter deal with the summary and conclusions. It focuses on the applications and gives recommendations for nursing practices, nursing research, nursing administration, and nursing education.

SUMMARY

The purpose of the study was "A study to evaluate the effectiveness of video assisted teaching on knowledge and attitude regarding prevention of worm infestation among mothers of toddlers in selected rural areas at Dindigul District.."

THE OBJECTIVES OT THE STUDIES WERE

1. To assess the pre and post test level of knowledge and attitude on prevention of worm infestation among mothers of toddlers in control and experimental group
2. To evaluate the effectiveness of video assisted teaching on knowledge and attitude on prevention of worm infestation among mothers of toddlers in experimental group.
3. To correlate the knowledge and attitude on prevention of worm infestation among mothers of toddlers
4. To determine the association between knowledge and attitude on prevention of worm infestation and their selected demographic variables.

The researcher adopted a quasi-experimental pre test – post test design for the study. The setting of the study was selected in Reddiyarpatty and Ammapatty at Dindigul district. The population included all the mothers of toddlers in selected

areas. The sample comprised of 60 mothers of toddlers who fulfilled the inclusive criteria - 30 for the experimental group and 30 for the control group. The investigator used purposive sampling technique to select the samples.

The tool constructed for this study was a self-structured questionnaire to assess the knowledge of the mothers of toddlers. To assess the attitude, a three point rating scale (Likert) was used. Content validity of the tool was obtained from 2 medical experts and 5 nursing experts in the field of paediatrics. As per the consensus of the experts, the tool was modified and finalized. The pilot study was conducted at kannivadi and puddhupatty at Dindigul. The tool was found to be practicable and feasible. The reliability of the tool was established by using test- retest method and split-half method. The 'r' values were 0.9 and 0.8 respectively, which was found to be highly reliable. Hence the tool was finalized to proceed with the main study.

The ethical aspects of the study was maintained throughout the study by getting formal permission from the respective authorities and informed verbal consent form the participants of the study. The information collected from the mothers of toddlers were kept confidential and it was used only for research purpose. The pre test was conducted for the experimental and control group .The participants of the experimental group alone were given the video assisted teaching and after 7 days the post test was done for both the experimental and the control group. The data collected was analysed using descriptive and inferential statistics. Interpretation and discussion was done based on the objectives of the study and the hypothesis formulated.

MAJOR FINDINGS OF THE STUDY:

- In the experimental group, with regards to age majority of the mothers 15(50%)of them belonged to 20-25 years. Regarding religion 16(53.3%) were Christian. Regarding education 12(40%) of them had secondary education . With regards to occupation 9(30%)mothers were government employees, In monthly income of the family 14(47.3%) is Rs5000-10000, . Regarding place of defecation 23(76.7%) were practicing open field defecation . With regards to source of drinking water 18(73.3%) were drinking tape water, with regard to source of health information, 13(43.3%) received from health workers

  In the control group, with regards to age majority of the mothers 13(43.3%)of them belonged to 20-25 years. Regarding religion 16(53.3%) were Christian. Regarding education 11(36.7%) of them had primary education. With regards to occupation 9(30%)mothers were housewife , In monthly income of the family 15(50%) is Rs.5000-10000. Regarding place of defecation 24(80%) were practicing open field defecation. With regards to source of drinking water 22(73.3%) were drinking tape water, with regard to source of health information, 22(73.3%) received from health workers.

- The knowledge of the mothers of toddlers in the experimental group were 23(76.7%) mothers of toddlers had inadequate knowledge, 7(23.3%) of the mothers had moderately adequate knowledge and none of them had adequate knowledge in the pre-test. In the post test findings majority of the mothers 27 (90%) had adequate knowledge, 3(10%) of the mothers had moderately adequate knowledge and none of the mothers had inadequate knowledge. Hence H_1 was accepted. This findings reveals that the video assisted teaching improved the level of knowledge of mothers of toddlers in the experimental group in the post test.

- In the control group 22(73.3%) mothers had inadequate knowledge, 8(26.7%) mothers had moderately adequate knowledge and none of the mothers had adequate knowledge and there was no change in the post test level of knowledge of the mothers.
- In experimental group 17(56.7%) mothers had unfavourable attitude, 13(43.3%) of the mothers had moderately favourable attitude and none of the mothers had highly favourable attitude in the pre test experimental group. In post test 28 (93.3%) of the mothers had favourable attitude, 2 (6.7%) of the mothers had moderately favourable attitude and none of the mothers had unfavourable attitude. Hence H_2 was accepted. This findings concluded that the video assisted teaching was highly effective to impart favourable attitude about prevention of worm infestation.
- In the control group 25(83%) mothers had unfavourable attitude, 5(17%) mothers had moderately favourable attitude and none of the mothers had highly favourable attitude in the pre test. In post test 24(82%) mothers had unfavourable attitude, 6 (18%) mothers had moderately favourable attitude and none of the mothers had favourable attitude. With this findings it can be inferred that there was no change in the attitude of mothers in the control group.
- The experimental group calculated 't' test value for knowledge was 16.17 which was significant at the level of $p<0.001$. It can be concluded that the video assisted teaching was highly effective in improving the knowledge of the mothers of toddlers about prevention of worm infestation.
- The experimental group calculated 't' test value for attitude was 5.90 significant at the level of $p<0.01$. It can be inferred that the video teaching was highly effective to impart favourable attitude to the mothers of toddlers about prevention of worm infestation .

- In comparing pre test scores of experimental and control group the calculated "t" value was 3.96 and 2.60, which was not significant at the level of $P<0.05$. Thus with this findings it can be concluded there was no change in the level of knowledge and attitude of mothers of toddlers both in the experimental and control group in the pre-test.
- In comparing post test scores of experimental and control group the calculated "t" value was 15.05 and 8.43 which was significant at the level of $P<0.001$. Thus with this findings it can be concluded that the video assisted teaching was highly effective in improving the level of knowledge and attitude of mothers in the experimental group.
- The correlation for the level of knowledge and attitude of mothers of toddlers the value for $r = 0.1767$ which was significant at the level of $p<0.001$. Thus it can be inferred that there was a positive correlation between the knowledge and attitude of mothers of toddlers on prevention of worm infestation in the experimental group.
- There was statistically significant association at the level of $P<0.05$ between the knowledge of the mothers of toddlers on prevention of worm infestation and the place of defecation in experimental group. There was statistically significant association at level of $P<0.05$ between the attitude of the mothers of toddlers on prevention of worm infestation and the place of defecation in the experimental group. Hence research hypothesis H_3 was accepted.

The finding of the present study clearly states that the video teaching of prevention of worm infestation was improve the knowledge and attitude of mothers of toddlers.

IMPLICATION

The investigator has drawn the following implications from the study which is of vital concern in the field of nursing practice, nursing administration, nursing education and nursing research.

NURSING PRACTICE

Nurses practicing in the clinical area have a good opportunity to educate the mothers on prevention of worm infestation.

- It is the responsibility of the nurses in the clinics to educate the mothers. So as to create more awareness among them which will in turn reduce preventable complications.
- The community health nurses can educate the village health nurses about the content of prevention of worm infestation education to disseminate the information to the mothers in the community.
- The prevention of worm infestation CD can be played in the waiting room of the children's OPD so that the mothers will be able to gain information while waiting for their check-up.

NURSING EDUCATION

- Nurse educator must update the knowledge about worm infestation .
- Nurse educator should teach nursing students to gain skills in identifying problems and can be give effective knowledge to improve the level of knowledge and attitude among peoples.

NURSING ADMINISTRATION

- Nurse administrators should provide the necessary infrastructure to play the video-CD in the well ventilated area.

- Funds should be allotted for the procurement of television and video-CD player.
- Seating arrangements should be made and an optimal place to fix the AV aid should be arranged.
- The nurse administrator can encourage the mothers of toddlers and student nurse to involve in research activities of prevention of worm infestation

NURSING RESEARCH

- The findings of the study should be disseminated through conferences, seminars and publishing in nursing and other health journals.
- The findings of the study will encourage professional nurses and nursing students to procure knowledge on the aspects of prevention of worm infestation.
- The findings of the study will help in building and strengthening the body of knowledge in the discipline of nursing.

LIMITATIONS

- The researcher finds difficult to get better co-operation from the mothers of toddlers.
- The mothers felt it tedious to answer 30 + 20 items of the questionnaire as it took about 30-40 minutes to complete.

RECOMMENDATIONS

- The video assisted teaching can be played in the well ventilated area for the mothers of toddlers to gain knowledge on prevention of worm infestation
- Similar type of video-CDs can be prepared in various aspects of worm infestation including causes, types of worms, lifecycle, mode of transmission, signs and symptoms, diagnostic evaluation ,treatment and preventive methods

- The study can be replicated with a large number of samples for better generalization.
- A similar study can be carried out by using various teaching methods and skill training strategies
- An experimental study can be conducted to find the effectiveness of teaching on the prevention of worm infestation outcome.

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APPENDICES

APPENDIX -I

SAKTHI INSTITUTION
LIVE TO SERVE
SONDHMAN CHARITABLE TRUST

SAKTHI COLLEGE OF NURSING

(Approved by Govt. of Tamilnadu, Recognised by INC, TNC & Affiliated to Dr. M.G.R. Medical University)

Sakthi Nagar, Dindigul - Palani Main Road,
Palakkanuthu - (Po.),
Oddanchatram - 624 619.
Dindigul (Dt.), Tamilnadu.

Phone : 0451 - 2050272
Mobile : 97509 56810
Fax : 0451-2554317
E-mail : sakthinursingcollege@gmail.com

PERMISSION LETTER

From

The Principal,
Sakthi College of Nursing,
Oddanchatram, Dindigul (Dt)

To

The Medical Officer,
Primary Health Centre
Kannivadi.

Respected Sir / Madam,

Sub.: Request for permission to conduct research study – reg.

MS. DINI .D. J is a bonafide M.Sc., Nursing student studying in our college. As a partial fulfillment of The Tamilnadu Dr. MGR Medical University requirement for the award of the M.Sc., Nursing Degree, she is undertaking (A QUASI EXPERIMENTAL STUDY TO EVALUATE **"THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME ON KNOWLEDGE AND ATTITUDE REGARDING PREVENTION OF WORM INFESTATION AMONG MOTHERS OF TODDLERS IN SELECTED RURAL AREAS AT DINDIGUL")**, she has identified your centre as the best place to conduct the study.

Further details of the proposed project will be furnished by the student personally. She will not hinder your routine in any way and she will abide to the rules and regulations of the institution. All the information collected from institution will be kept confidential.

I kindly request you to grant her permission to conduct the study at your esteemed institution.

Thanking you,

yours sincerely,

Date :

Place :

10.3.16
Block Medical Officer,
Govt. Community Health Centre,
Kannivadi.

PRINCIPAL
Sakthi College of Nursing
Sakthi Nagar, Palakkanuthu
Dindigul - (Dist)
624 624

APPENDIX - II

CONTENT VALIDITY

From

Miss. D.J. Dini,
M.Sc Nursing II Year,
Sakthi College of Nursing.
Oddanchatram, Dindigul.

To

Respected Sir / madam,

Sub:-Requisition from expert opinion and content validity reg.

I am 2nd year MSc Nursing student Sakthi College of Nursing Oddanchattram, Dindigul under Tamilnadu Dr.MGR Medical University.

As a partial fulfillment of M.Sc Nursing Degree program, I am conducting a research study "A quasi experimental study to evaluate the effectiveness of video assisted teaching on knowledge and attitude regarding prevention of worm infestation among mothers of toddlers in selected areas at Dindigul district".

I am sending the research tool for content validity and request you to give your expert and valuable review and opinion. I will be very thankful if you return at the earliest. Here with I have enclosed the necessary documents.

Thanking you.

Enclosure: Yours sincerely.

- Statement of the problem and objectives of the study
- Tool with blueprint and scoring key
- Brief note on the research methodology and intervention tool
- Certificated of content validity.

APPENDIX -III

CERTIFICATE OF CONTENT VALIDITY

TO WHOMSOEVER IT MAY CONCERN

This is to certify that the tool prepared by **D.J.DINI** , M.Sc (N) II Year student of Sakthi College of Nursing for the conduction of the study " **A STUDY TO EVALUATE THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING ON KNOWLEDGE AND ATTITUDE REGARDING PREVENTION OF WORM INFESTATION AMONG MOTHERS OF TODDLERS IN SELECTED RURAL AREAS AT DINDIGUL DISTRICT "** is valid. She can proceed in conducting the data collection .

Place : **Signature**

Date:

APPENDIX -IV

LIST OF EXPERTS

1. **Dr.Satheesh,MBBS,DCH.,**
   Medical officer ,
   Primary Health Care,
   Kannivadi.
2. **Prof.Mrs .Sumathi, M.Sc (N),**
   Principal,
   Dept. of child Health Nursing,
   Sacred Heart College Of Nursing,
3. **Prof Mrs.Arockia Mary, M.Sc(N),**
   Vice-Principal,
   Dept. of child Health Nursing,
   Christian College Of Nursing,
   Ambilikkai.
4. **Prof. Mrs. Helan, M.Sc (N),**
   Dept. of child Health Nursing,
   Madha College of Nursing,
   Sivagangai.
5. **Prof.Hanika Silviya Jeager,MSc(N),**
   Dept. of child Health Nursing,
   Konagarnadu college of Nursing,
   Kumbakonam.
6. **Asso.Prof. Arulsli,MSc(N),**
   Dept. of child Health Nursing,
   Dhasaiya college of Nursing,
   Kanyakumari.
7. **Mr.Mani Msc,MPhil,**
   Statistician,
   Madurai.

APPENDIX-V

CERTIFICATE OF ENGLISH EDITING

TO WHOM SO EVER IT MAY CONCERN

This is to certify that the dissertation "A study to evaluate the effectiveness of video assisted teaching on knowledge and attitude regarding prevention of worm infestation among mothers of toddlers in selected rural areas at Dindigul District" by Ms.D.J.Dini, M.Sc (N) –II year student of Sakthi College Of Nursing was edited for English Language appropriateness by **Ms.Narmatha Devi, M.A., M.Phil., Asst. Professor,** Department of English in Sakthi College Of Arts and Science. Oddanchatram.

Place:

Date: **Signature**

APPENDIX-VI

CERTIFICATE OF TAMIL EDITING

TO WHOM SO EVER IT MAY CONCERN

This is to certify that the dissertation "A study to evaluate the effectiveness of video assisted teaching on knowledge and attitude regarding prevention of worm infestation among mothers of toddlers in selected rural areas at Dindigul District " by Ms.D.J.Dini, M.Sc (N) –II year student of Sakthi College Of Nursing was edited for Tamil Language appropriateness by **Mrs.B. Rathi Devi, M.A., M.A.,M.phil.,PhD Asst. Professor.,** Department of Tamil in Sakthi College of Arts and Science.

Place:

Date: **Signature**

APPENDIX-VII

SECTION-A: DEMOGRAPHIC VARIABLES

Introduction to Participants:

Dear Participants,

This section consists of the personal information and you are requested to answer the question correctly. The information collected from you will be kept confidential.

Read the following items carefully and complete them by ticking the right option

Sample No

1) Age of the mother

a) 20-25 years

b) 26-30years

c) 31- 35years

2) Religion

a) Hindu

b) Muslim

c) Christian

3) Educational status

a) Illiterate

b) Primary education

c) Secondary education

d) Higher secondary

4) Occupational status

a) Housewife

b) Agriculture

c) Private employee

d) Government employee

5) Monthly income of the family

a) Less than Rs 5,000

b) 5,000-10,000

c)11,000-15,000

d) Above Rs 15,000

6) Place of defecation

a) Open field defecation

b) Latrine

7)Source of drinking water

a) Tape water

b) River water

c) Well water

8) Source of health information

a) Health worker

b) Family peer group

c) Mass media

SECTION – B

QUESTIONNARIE ON KNOWLEDGE

***General instruction*: Please read the question and answer carefully. Choose the right answer and place the tick mark against the right answer.**

1. What is worm infestation?
    a) It is a parasitic disease
    b) It is a bacterial disease
    c) It is viral disease
    d) It is a fungal disease
2. What are all the causes of worm infestation?
    a) Improper disposal of human excreta
    b) Drinking contaminated water
    c) Improper disposal of garbage waste
    d) All the above
3. Where does the round worm lives in our body?
    a) Liver
    b) Large intestine
    c) Small intestine
    d) Pancreas
4. What is the length of thread worm?
    a) 4cm
    b) 3cm
    c) 2cm
    d) 1cm
5. Where does the thread worm lay eggs in the human body?
    a) Stomach
    b) Small intestine
    c) Perianal region
    d) Large intestines

6. What is the common age group of worm infestation?

a) Adult
b) Old age
c) New born
d) Less than 10 years

7. Which is the mode of transmission of hook worm infestation?

a) Faeco-oral route
b) Blood and blood products
c) Skin to skin contact
d) Droplet infection

8. What is pica?

a) Eating of fruits and vegetables
b) Eating of fish and mutton
c) Eating of sugar and stones
d) Eating of sand, stones

9. Which is the common breeding place of hook worm?

a) Water
b) Contaminated soil
c) Coastal area
d) Contaminated food

10. What is the life span of adult hook worm ?

a) 1-2 years
b) 2-3 years
c) 4-5 years
d) 1-5 years

11. How many ml of blood is sucking from our body by each hook worm per day

a) 0.13-0.15ml
b) 1-2ml
c) 2-3ml
d) 3-4ml

12. Which worm is causing anaemia?

a) Thread worm
b) Hook worm
c) Round worm

d) Tape worm

13. What is the life cycle of hook worm infestation?

a) foot-blood-lungs-intestine-faeces
b) Blood –liver-brain-lungs
c) Liver-heart-faeces
d) Mouth-liver-blood

14. What are all the clinical manifestations of round worm infestation ?

a) Tooth ache ,head ache
b) Leg pain ,back pain
c) Throat pain ,ear pain
d) Abdomen pain, weight loss ,growth failure

15. What is the important feature of thread worm infestation?

a) Anaemia
b) Purities
c) Abdomen pain
d) fever

16. How will you diagnose the worm infestation?

a) Blood investigation
b) Urine examination
c) Stool examination
d) None of these

17. Which is the drug used to treat worm infestation?

a) Albendazole
b) Mebandazole
c) Piperazin
d) All the above

18. What is the drug of choice to treat anaemia?

a) Albendazole
b) Paracetomol
c) Iron and folic acid
d) calcium

19 .what is the dosage of albendazole?

a) 15mg/kg

b) 10mg/kg

c) 20mg/kg

d) 5mg/kg

20. What are all the complication of worm infestation?

a) Kidney failure, liver failure

b) Intestinal obstruction, perforation

c) Fever, wheezing

d) Meningitis, paralysis

21. Which of the following are vitamin rich diet?

a) Pulses ,cereals

b) Chicken, mutton ,beef

c) Dates ,milk, honey

d) Green leafy vegetables, papaya

22. Which of the following are iron rich diet?

a) Pulses, cereals

b) Chicken, mutton,

c) Dates ,honey ,drumstick leaves

d) Onion, tomato, papaya

23. What are all the preventive measures of worm infestation ?

a) Hand washing with soap after defecation

b) Safe drinking water

c) Using sanitary latrine

d) All the above

24. How will you prevent soil pollution ?

a) Using sanitary latrines

b) Using fertilizer

c) Hand washing

d) None of these

25. What is the vitamin present in carrot ?

a) Vitamin k

b) Vitamin D

c) Vitamin C

d) Vitamin A

26. Which food ingredients play an vital role in the prevention of worm infestation?

a) Mustard , pepper
b) Fenugreek, chilly
c) Garlic, turmeric
d) Dhal, Bengal gram

27. What is the role of using turmeric in worm infestation?

a) Destroy the eggs of worms
b) Kill the worms
c) Expel the worms
d) Paralysis the worms

28. How will you prevent anaemia?

a) Advice to take iron rich foods
b) Blood investigation
c) Advice to take protein rich diet
d) Both (a) &(b)

29. What is the role of pumpkin seed in worm infestation?

a) Kill the worms
b) Paralysis the worms
c) Destroy the eggs
d) Expel the worms

30. Which is the effective method to prevent tape worm infestation?

a) Washed the vegetables before cooking
b) Cook the meat properly
c) Hand washing
d) Drinking boiled water

SECTION C -ATTITUDE QUESTIONS

Make a tick mark indicating your opinion about the following statements.

S.no	Attitude	Strongly Agree	Agree	Disagree
1	Worm infestations are caused by improper sanitation			
2	Bare foot causes worm infestation			
3	Worm infestation is a droplet infection			
4	Stool examination is necessary for worm infestation			
5	Eating of raw food is good for health			
6	Playing in the soil is a mode of transmission of hook worm infestation			
7	Normally we can take albendazole tablets monthly once			
8	Boiled water is good for health Cuts short your children nails weekly once			
9	Cuts short your children nails weekly once			
10	Hand washing with soap is to be done after defecation			
11	Garlic are rich in iron			
12	Daily menu plan should consist of iron and vitamin rich food			
13	Practice the children's to defecate in latrine			
14	Washing the vegetables and fruits are a good habits			
15	Monthly health check up is not essential for children			
16	Turmeric is a natural remedy for intestinal worm			
17	Daily exercise can prevent the worm infestation			
18	Tape worm infestation can be prevented by well cooked meat			
19	Personal hygiene is an important preventive measures for worm infestation			
20	Daily intake of more sweet is good for children			

பிரிவு -அ

வடிவமைக்கப்பட்ட பேட்டி காணும் அட்டவணை

தாய் மார்களின் சுயவிவரம் தாய்மார்களைப் பற்றிய தகவல்கள் கீழ்க்கண்டவற்றில் உள்ள கேள்விகளில் உங்களது விவரங்களை இந்த குறியீட்டில் குறிக்கவும்.

1. தாயின் வயது

   அ) 20-25 வயதுக்குள்

   ஆ) 26-30 வயதுக்குள்

   இ) 31-35 வயதுக்குள்

2. மதம்

   அ) இந்து

   ஆ) முஸ்லீம்

   இ) கிறிஸ்தவம்

3. கல்வி தகுதி

   அ) படிக்கவில்லை

   ஆ) ஆரம்பப்பள்ளி

   இ) உயர்நிலைப்பள்ளி (10 ஆம் வகுப்பு)

   ஈ) மேல்நிலைப்பள்ளி (12 ஆம் வகுப்பு) & மற்றவை

4. தொழில்

   அ) இல்லத்தரசி

   ஆ) விவசாயம்

   இ) தனியார் வேலை

   ஈ) அரசு வேலை

5. மாதம் வருமானம்

   அ) 5,000ரூபாய்க்கும் கீழ்

   ஆ) 5,000_ 10,000 ரூபாய்

   இ)11,000 – 15,000 ரூபாய்

   ஈ) 15,000 ரூபாய்க்கும் மேல்

6. மலம் கழிப்பது

   அ) திறந்த வெளியில்

   ஆ) கழிப்பறையில்

7. குடிநீர்

   அ) குழாய்நீர்

ஆ) ஆற்றுநீர்

இ) கிணற்றுநீர்

8. குடல்புழு தொற்றை குறித்து அறிவு இருக்கிறதா?

ஆம் என்றால் குடல்புழுதொற்றின் தடுப்புமுறைகளை கூறியது யார்?

அ) நலவாழ்வுப் பணியாளர்கள்

ஆ) நண்பர்கள் மற்றும் குடும்பத்தினர்

இ) தகவல் தொடர்பு சாதங்கள்

பகுதி: ஆ

குடல் புழு தொற்றைக் குறித்தான தாய்மார்களின் அறிவு திறனை சோதிக்கும் வினா நிரல்

குறிப்பு :-கீழ்க்கண்ட வினா-விடைகளை கவனமாகப் படிக்கவும் மற்றும் வினாவிற்கான சரியான விடையை சரி (✓) குறியிட்டுக் குறிக்கவும்.

1. குடல் புழு தொற்றுநோய் என்றால் என்ன?

   அ. இது ஒரு ஒட்டுண்ணி நோய்

   ஆ. இது ஒரு பாக்டீரியா நோய்

   இ. இது ஒரு வைரஷ் நோய்

   ஈ. இது ஒரு பூஞ்சை நோய்

2. குடல் புழு நோய்களின் காரணங்கள் என்ன?

   அ. சுகாதாரமற்ற முறையில் மலம் கழித்தல்

   ஆ. சுகாதாரமற்ற நீரை அருந்துதல்

   இ. தவறான முறையில் கழிவுகளை அகற்றுதல்

   ஈ. மேலே உள்ள அனைத்தும்

3. நமது உடலில் உருண்டை புழு எந்த இடத்தில் இருக்கிறது.

   அ. கல்லீரல்

   ஆ. பெருங்குடல்

   இ. சிறுகுடல்

   ஈ. கணையம்

4. கீரிப்பூச்சியின் நீளம் என்ன?

   அ. 4 செ.மீ

   ஆ. 3 செ.மீ

   இ. 2 செ.மீ

   ஈ.1 செ.மீ

5. கீரிப்பூச்சியின் நமது உடலில் எந்த இடத்தில் முட்டை இடுகின்றது?

அ. இரைப்பை

ஆ. சிறுகுடல்

இ. மலக்குடல்

ஈ.பெருங்குடல்

6. பொதுவாக எந்த வயதில் குடல் புழு தொற்றுநோய் வருகின்றது?

அ. பருவம் வந்தவர்கள்

ஆ. முதியவர்கள்

இ. பச்சிளங்குழந்தைகள்

ஈ. 10 வயதிற்குட்பட்டவர்கள்

7. எந்த முறையில் கொக்கிப்புழு தொற்றுநோய் பரவுகின்றது?

அ. மலம் மற்றும் வாய் வழியாக

ஆ. இரத்தத்தின் வழியாக

இ. தோல் வழியாக

ஈ. தும்மல் வழியாக

8. பைக்கா என்றால் என்ன?

அ. பழம் மற்றும் காய்கறிகள் உட்கொள்ளுதல்

ஆ. மீன் மற்றும் இரைச்சி உட்கொள்ளுதல்

இ. சீனி மற்றும் உப்பு உட்கொள்ளுதல்

ஈ. கல் மற்றும் மண் உட்கொள்ளுதல்

9. எந்த இடத்தில் பொதுவாக கொக்கி புழுக்கள் வாழ்கின்றன?

அ. சுகாதாரமற்ற மண்

ஆ. நீர்

இ. கடற்கரை

ஈ. சுகாதாரமற்ற உணவு

10. கொக்கிப்புழுக்களின் வாழ்நாள் காலம் என்ன?

அ. 1 முதல் 2 வருடம்

ஆ. 2 முதல் 3 வருடம்

இ. 4 முதல் 5 வருடம்

ஈ. 1 முதல் 5 வருடம்

11. நமது உடலில் நாள் ஒன்றுக்கு கொக்கிப்புழு எவ்வளவு இரத்தத்தை உறிஞ்சுகின்றது?

அ. 0.13 முதல் 0.15 மி.லி

ஆ. 1 முதல் 2 மி.லி

இ. 3முதல் 4 மி.லி

ஈ. 2 முதல் 3 மி.லி

12. குழந்தைகளுக்கு எந்த வகையான புழுவினால் இரத்தசோகை ஏற்படுகின்றது?

அ.கீரைப்பூச்சி

ஆ. கொக்கிப்புழு

இ.நாடாப்புழு

ஈ. உருண்டைப்புழு

13. கொக்கிப்புழுக்களின் வாழ்க்கை சுழற்ச்சி என்ன?

அ. பாதம் - இரத்தம்- குடல்- மலம்

ஆ. இரத்தம் - கல்லீரல் - மூளை ___ நுரையீரல்

இ. கல்லீரல் - இதயம்- மலம்

ஈ. வாய் - கல்லீரல் - இரத்தம்

14. உருண்டைப்புழு தொற்றுநோயின் அறிகுறிகள் என்ன?

அ. பல்வலி, தலைவலி

ஆ. கால்வலி, முதுகுவலி

இ. காய்ச்சல்

ஈ.வயிற்றுவலி, இடைக்குறைதல், வளர்ச்சி குறைபாடு

15. கீரிப்பூச்சியின் முக்கிய அறிகுறிகள் என்ன?

அ. இரத்தசோகை

ஆ. வயிற்றுவலி

இ. காய்ச்சல்

ஈ. ஆசனவாய் அரிப்பு

16. குடல் புழு தொற்றுநோய் எவ்வாறு கண்டறியலாம்?

அ. இரத்தம் பரிசோதனை

ஆ. சிறுநீர் பரிசோதனைஸ

இ. மலம் பரிசோதனை

ஈ. இவையனைத்தும் இல்லை

17. எந்த மருந்து குடல் புழு தொற்றுநோய்க்கு கொடுக்கப்படுகின்றது?

அ. அல்பெண்டசோல்

ஆ. மெபண்டசோல்

இ. பைப்ராசின்

ஈ. மேலே உள்ள அனைத்தும்

18. இரத்தசோகையை குணப்படுத்த உதவும் மருந்து என்ன?

அ. பாராசிட்டமால்

ஆ. அல்பெண்டசோல்

இ. கால்சியம் மாத்திரை

ஈ. இரும்புச்சத்து மாத்திரை

19. அல்பெண்டசோல் மாத்திரையின் அளவு என்ன?

அ. 15 மி.கி/கி

ஆ. 10 மி.கி/கி

இ. 20 மிகி/கி

ஈ. 5 மி.கி/கி

20. குடல் புழு தொற்றுநோய்களின் விளைவுகள் என்ன?

அ. சிறுநீரகம், கல்லீரல் செயலிழத்தல்

ஆ. குடல் அடைப்பு, குடலில் துளையிடுதல்

இ. காய்ச்சல், இளப்பு

ஈ. முளைக்காய்ச்சல், பக்கவாதம்

21. கீழ்கண்டவற்றில் வைட்டமின் நிறைந்த உணவு வகைகள் எது?

அ. பச்சை நிறக்காய்கறிகள், பப்பாளி, காரட்

ஆ. தானியவகைகள்,

இ. கோழி, ஆடு இறைச்சிகள்,

ஈ. பேரிச்சம்பழம், பால், தேன்

22. கீழ்க்கண்டவற்றில் இரும்புச்சத்து நிறைந்த உணவுவகைகள் எது?

அ. தானிய வகைகள்

ஆ. கோழி, ஆடு, இறைச்சிகள்

இ. பேரிச்சம்பழம், தேன், முருங்கை கீரை

ஈ. வெங்காயம், தக்காளி, பப்பாளி

23. குடல்புழு தொற்றுநோய்களின் தடுப்புமுறைகள் என்ன?

அ. மலம் கழித்தப்பிறது சோப்பை பயன்படுத்தி கைகளை கழுவுதல்

ஆ. கழிப்பறையில் மலம் கழித்தல்

இ. சுகாதாரமான நீரை அருந்துதல்

ஈ. மேலே உள்ள அனைத்தும்.

24. எவ்வாறு மண் மாசுபடுதலை தடுக்கலாம்

அ. உரம் இடுதல்

ஆ. கைகளை கழுவுதல்

இ. இவற்றில் இல்லை

ஈ. கழிவறையில் மலம் கழித்தல்

25. நாடாப்புழு தொற்றுநோய்களின் தடுப்பு முறை என்ன?

அ. சமைப்பதற்கு முன் கைகளை கழுவுதல்

ஆ. இறைச்சிகளை நன்றாக வேகவைப்பதன் மூலம்

இ. காய்ச்சி வடிகட்டிய நீரை அருந்துதல்

ஈ. காய்கறிகளை கழுவுதல்

26. எந்த உணவு பொருள் குடல்புழு தொற்றுநோயை சிறந்த முறையில் தடுக்க உதவுகின்றது.

அ. கடுகு, மிளகு

ஆ. வெந்தயம், மிளகாய்

இ. பூண்டு, மஞ்சள்

ஈ. பருப்பு, கொண்டைக்கடலை

27. புழுத் தொற்றுநோயில் மஞ்சளின் முக்கிய பங்கு என்ன?

அ. புழுக்களின் முட்டைகளை அழித்தல்

ஆ. புழுக்களை அழித்தல்

இ. புழுக்களை உடலில் இருந்து வெளியேற்றுதல்

ஈ. புழுக்களை செயலிழத்தல்

28. இரத்தசோகையை தடுக்கும் முறைகள் என்ன?

அ. இரும்புச்சத்து நிறைந்த உணவுகளை உட்கொள்ளுதல்

ஆ. இரத்தபரிசோதனை

இ. (அ) மற்றும் (ஆ) இரண்டும்

ஆ. புரதசத்து உணவுகளை உட்கொள்ளுதல்

29. குடல் புழு தொற்றுநோயை குணப்படுத்துவதில் பூசணிக்காய் விதையின் பங்கு என்ன?

அ. புழுக்களை கொல்கின்றது

ஆ. செயலிழத்தல்

இ. முட்டைகளை அழித்தல்

ஈ. புழுக்களை வெளியேற்றுதல்

30. காரட்டிலுள்ள வைட்டமின் எது?

அ. வைட்டமின் கெ

ஆ. வைட்டமின் டி

இ. வைட்டமின் சி

ஈ. வைட்டமின் எ

பிரிவு இ

நோக்க அளவீடு

கீழ்காணும் வாங்கியங்களை படித்து உங்கள் கநத்தை தெரிவிக்கவும்

வண்ணமாக பொருத்தமான கட்டத்துள் சாி என குறிக்கவும்

வ.எண்	வாக்கியம்	மனப்பூர்வமாக ஒத்துக்கொள்கிறேன்	ஒத்துக் கொள்கிறேன்	மறுக்கிறேன்
1.	குடல்புழு தொற்றின் காரணம் சுகாதாரமற்ற நிலை			
2.	குடல்புழு தொற்று காலணிகள் பயன்படுத்தாதவர்களுக்கு வருகின்றது			
3.	குடல்புழு தொற்று ஒரு தொற்றுநோய்			
4.	மலம ் பரிசோதனை குடல் புழு தொற்றுநோயை கண்டறிய பயன்படுகிறது			
5.	பச்சை காய்கறிகளை உண்பது உடலுக்கு நலம் தரும்			
6.	மண்ணில் விளையாடுதல் மூலம் புழுத்தொற்றுநோய் பரவுகிறது			
7.	பொதுவாக அல்பென்ட சோல் மாத்திரை மாதம் ஒருமுறை உண்ணலாம்			
8.	கொதிக்க வைத்த நீரை அருந்துவது உடலுக்கு நல்லது			
9.	வாரத்திற்கு ஒரு முறை குழந்தைகளின் நகங்களை வெட்ட வேண்டும்			
10.	மலம் கழித்தப்பின் கைகளை சோப்பு போட்டு கழுவ வேண்டும்			
11.	காரட்டில் இரும்புச்சத்து அதிகம் நிறைந்துள்ளது			
12.	தினசரி உணவு பட்டியலில் இரும்புசத்து மற்றும் வைட்டமின்			

	சத்து நிறைந்த உணவுகள் உள்ளன			
13.	குழந்தைகளை கழிப்பறையில் மலம் கழிக்க பயிற்றுவிக்க வேண்டும்			
14.	பழங்களையும் காய்கறிகளையும் உண்பதற்கு முன் தண்ணீரில் சுத்தமாக கழுவுவது நல்ல பழக்கம்			
15.	மாதம் ஒருமுறை குழந்தைகளுக்கு உடல்நல பரிசோதனை தேவையற்றது			
16.	குடல்புழுக்களுக்கு மஞ்சள் பொடி ஒரு இயற்கையான மருந்தாகும்			
17.	தினசரி உடற்பயிற்சியின் மூலம் குடல்புழு தொற்றை தடுக்கலாம்			
18.	இறைச்சிகளை நன்றாக வேகவைப்பதன் மூலம் நாடாப்புழுத் தொற்றை தடுக்கலாம்			
19.	தன் சுத்தம் குடல் புழு நோய்களுக்கு முக்கியமான தடுப்பு முறையாகும்			
20.	குழந்தைகள் தினமும் அதிகமான இனிப்பு வகைகள் உட் கொள்ளலாம்			

APPENDIX –VIII

SCORING KEY-A

QUESTIONNAIRE ON KNOWLEDGE

QUESTION NO	ANSWER	QUESTION NO	ANSWER
1	A	16	C
2	D	17	D
3	C	18	C
4	D	19	A
5	C	20	B
6	D	21	D
7	A	22	C
8	D	23	D
9	B	24	A
10	D	25	D
11	A	26	C
12	B	27	B
13	A	28	C
14	D	29	B
15	B	30	B

SCORING KEY-B

ATTITUDE SCALE

S.No	**Strongly Agree**	**Agree**	**Disagree**
1	3	2	1
2	3	2	1
3	1	2	3
4	3	2	1
5	1	2	3
6	3	2	1
7	1	2	3
8	3	2	1
9	3	2	1
10	3	2	1
11	1	2	3
12	3	2	1
13	3	2	1
14	3	2	1
15	1	2	3
16	3	2	1
17	1	2	3
18	3	2	1
19	3	2	1
20	1	2	3

LESSON PLAN

APPENDIX - IX

LESSON PLAN ON PREVENTION OF WORM INFESTATION

TOPIC : PREVENTION OF WORM INFESTATION

GROUP : MOTHERS OF TODDLERS

PLACE : REDDIYARPATTY,DINDIGUL

DURATION : 30 MINUTES

TEACHING METHOD : VIDEO SHOW

INSTRUCTOR : INVESTIGATOR

INSTRUCTIONAL AID : VIDEO COMPACT DISC

GENERAL OBJECTIVES

Help the mother to acquire in depth knowledge about worm infestation and develop desirable attitude and skills in such knowledge while providing comprehensive nursing practice

GENERAL OBJECTIVES

- define worm infestation
- list out the causes of worm infestation
- explain about the life cycle of hook worm
- enumerate the mode of transmission of tapeworm
- enlist the clinical manifestations
- describe the medical management of worm infestation
- discuss about the preventive measures of worm infestation

TIME	SPECIFIC OBJECTIVES	CONTENTS	TEACHERS ACTIVITY	LEARNERS ACTIVITY	AV AIDS
	The mothers Will be able To define worm infestation	**INTRODUCTION** Hello, I am Ms. D.J.Dini Msc (Nursing)-II year from the Sakthi College of Nursing. I am going to explain to you in detail about prevention of worm infestation. DEFINITION: Helminth infections refer to worms that live as parasites in the human body. Worm infection occurs when infective eggs, or larvae, enter the body, mature, lay eggs and feed off the person. INCIDENCE Globally, more than 3.5 billion people are infected with intestinal worms. Of them, 1.47 billion have roundworm; 1.3 billion are infected with hookworm and 1.05 billion with whipworm. The highest rates of roundworm, hookworm and thread worm infections are often in children below 5 years of age It is estimated that about 400 million school-age children are infected with these three types of worms.	Lecturer Cum discussion	Listening	LCD

	The mothers will be able to list out the causes of worm infestation	CAUSES: • Infective disposable of human excreta • poor environmental sanitations • Poor personal hygiene • Children who are eating mud and playing • Infection through the unwashed vegetables • Drinking contaminated water • Eating infected food • Eating of already infected beef pork without washing TYPES OF WORMS ❖ Round worms (ascaris lumbricoides) ❖ Thread worms or pin worm(enterobius vermicularis) ❖ Hook worm(ancyclostemo-duodenale) ❖ Tape worm(teniasis) **HOOK WORM** The hook worm lives in the smallintestine mainly jejunum and remain attached to the intestinal villi. hook worm attaches to the intestine by biting into the lining thus causing ulcers and lesions **THREAD WORM** It is very common worm infestation of infants and young children ,the worm is about 1cm long thread like white in colour .	Lecturer Cum discussion Lecture cum discussion	Listening Listening	

	The mothers will be able to explain about the life cycle of worm	**TAPE WORM** Tape worms are mostly taenia solium and taenia saginata. taenia saginata is beef type worm taenia solium is pork type worm.these worm having suckers, hooks,and scollex. **ROUND WORM** Roundworm (*Ascaris lumbricoides*) is the largest of the human intestinal parasites. It occur due to lack of sanitary facilities or due to ingestion of contaminated fruits and vegetables. LIFE CYCLE Infection occurs through the ingestion of eggs .the larvae are hatched in the small intestine these larvae invade the intestional mucosa ⇩ Migrates to lungs through the circulation and break into the alveoli ⇩ Reach in bronchi and trachea then in small intestine through the swallowing and develop as adult worm ⇩			

	The mothers will be able to enumerate the mode of transmission of worm infestation The mothers will be able to enlist the clinical manifestation of worm infestation	After that worms produces a eggs these passes with feces **MODE OF TRANSMISSION** • By the faeco –oral route • Foods that are eaten raw • Contaminated soils • Eggs are carried under finger nails during perianal scratching • Contaminated water • Contaminated fruit and vegetables • Infected larvae penetrates in bare foot **CLINICAL MANIFESTATION** • Pain in abdomen ,abdominal distention • Nausea ,cough, loss of weight ,growth failure • Anemia ,vitamin deficiency, • fever , • Adult worm may pass in the stool • Diarrhea ,vomiting • Purities is the important features • Iron deficiency anemia ,pica , • Abdominal distention	Lecture cum discussion		

	The mothers will be able to describe the medical management of worm infestation The mothers	**DIAGNOSTIC EVALUVATION** • History collection • Physical examination • Stool examination • early morning perianal swab • Blood investigation • Ultrasound sonography **MANAGEMENT** MEDICAL MANAGEMENT: • Albendazole 15mg/kg orr mebandazole100mg/kg • Levamisole single dose 2.5mg/kg • Anti –pruritic cream (crotamitone) • Iron and folic acid tablets 200mg/day for anemia • Blood transfusion for sever anemia • Niclosmide is drug of choice for tape wom infestation **PREVENTIVE MEASURES** • The first preventive measures is proper sanitary disposal of human excreta that prevent soil pollution	Lecture cum discussion		

	will be able to discuss about the preventive measures of worm infestation	• Avoid open air defecation • Safe drinking water by chlorination of water • Practicing good sanitation and hygien habits • Use sanitary latrines • Washing hands with soap before eating or feeding children and after defecation • Wash cooking vegetables thoroughly • Cut short the nails • Wear suitable foot wears while contacting with soil ,the worms or larva penetrates the skin • Conducting de-worming programs • Health education to the family and community • Avoid over eating of raw vegetables • Avoid children's to play in contaminated soils • Gramets can be washed using antiseptic solution and dried in sun light • Eat properly cooked meat • Do not allow the child to eat mud • Advice to take iron rich foods like dates, honey ,milk ,drumstick and their leaves • Advice to take vitamin rich diets like carrot Spinach ,green leafy vegetables HOME REMEDIES FOR WORM INFESTATION	Lecture cum discussion		

		➢ Garlic :Eating cloves of raw garlic on an empty stomach every day for one week is one of the simplest ways to rid of all types of intestinal worms ➢ Pumpkin Seeds: Add two tablespoons of peeled and crushed pumpkin seeds to three cups of boiling water. Let it steep for 30 minutes. Allow it to cool, and then drink it. Try to fast for a day and drink the juice of boiled dry prunes to help cleanse the intestines before taking the pumpkin seed infusion. ➢ CARROT Grate two carrots Eat them on an empty stomach first thing in the morning. Avoid eating anything else during the morning. Do this every day for a week to get rid of intestinal worms ➢ TURMERIC Extract the juice from raw turmeric. Add a pinch of salt to one teaspoon of this juice. Drink it in the morning on an empty stomach. Repeat daily for a week. If you have turmeric powder then add one-half teaspoon of the powder and a pinch of salt to one-			

		half cup of warm water and drink it daily for five days. ➢ NEEM Take a neem leaf and paste it well, make a small ball .Take it in the morning on empty stomach. CONCLUSION Children's are mostly affected by worm infestation through improper sanitation , poor personal hygiene, contaminated foods ,ect., so the mothers are playing vital role in prevention of worm infestation through this video assisted teaching programme the mothers of toddlers gained adequate knowledge and attitude towards prevention of worm infestations			

APPENDIX-X

பாடத்திட்டம்

தலைப்பு	:	குடல் புழு தொற்று
குழு	:	1 – 3 வயது உள்ள குழந்தைகளின் தாய்மார்கள்
இடம்	:	ரெட்டியார்பட்டி,, திண்டுகல்
நேரம்	:	30 நிமிடங்கள்
கற்பிக்கும் முறை	:	ஒலி ஒளி நாடா விளக்கவுரை
கற்பிக்க உதவும் உபகரணங் கள்	:	மடிகணினி, ஒலி- ஒளி பேழை,
விளக்கமளிப்பவர்	:	ஆய்வாளர்

பொதுவான நோக்கம் : வகுப்பின் இறுதியில் தாய்மார்கள் அனைவரும் குடல் புழுதொற்றை பற்றிய ஆழமான அறிவுத்திறனும், மனதுக்குகந்த மனப்பான்மையும் பெறுவார்கள்.

குறிப்பான நோக்கம் : வகுப்பின் இறுதியில் தாய்மார்கள் அனைவருக்கும் கிடைக்கும் ஆற்றல்

- குடல் புழு தொற்றைக் குறித்து வரையறுத்தல்
- குடல் புழு தொற்றின் காரணங்களை பட்டியலிடுதல்
- குடல் புழுக்களின் வாழ்க்கை சுழற்சியை பற்றி விளக்குதல்
- குடல் புழு தொற்று பரவும் முறையை எண்ணிகையிடுதல்
- குடல் புழு தொற்றின் அறிகுறிகளை பட்டியலிடுதல்
- குடல் புழு தொற்றின் சிகிட்சை முறைகளை விரிவுரைத்தல்
- குடல் புழு தொற்றின் தடுப்பு முறைகளை குறித்து எடுத்துரைத்தல்

வரிசை எண்	குறிப்பான நோக்கம்	பொருளடக்கம்	கற்பித்தல் கற்றல் செயல்பாடு
	வகுப்பின் இறுதியில் தாய்மார்கள் அனைவருக்கும் கிடைக்கும் ஆற்றல் குடல் புழு தொற்றைக் குறித்து வரையறுத்தல் குடல் புழு தொற்றின் காரணங்களை பட்டியலிடுதல்	நான் செல்வி. டி.ஜே.டினி எம். எஸ். சி, நர்சிங் இரண்டாவது வருடம் சக்தி நர்சிங் கல்லூரியிலிருந்து வருகிறேன். இப்பொழுது குடல் புழு தொற்றை பற்றி விளக்கமாக கற்பித்து கொடுக்கப்போகிறேன். வரையறை குடல் புழு தொற்று என்பது புழுக்கள் நமது உடலில் ஒரு ஒட்டுண்ணிகளாக வாழ்கின்றது. புழுக்கள் முட்டை அல்லது Larua முலம். உடலுக்குள் சென்று, வளர்சி அடைந்து, பின் முட்டை இட்டு, மனிதனால் உட்கொள்ளபடுகிறது. உலகில் 3.3 பில்லியன் மக்களுக்கு குடல் புழு தொற்று உள்ளது. அதில் 400 மில்லியன் அளவு 5 வயதிற்கும் கீழ் உள்ள குழந்தைகள் என்பது குறிப்பிடதக்கது. <u>காரணங்கள்</u> ➢ திறந்த வெளியில் மலம் கழித்தல் ➢ கால் அணிகள்யின்றி வெளியில் நடப்பது ➢ சுகாதாரமற்ற சுற்று சூழல் ➢ நன்கு வேகவைக்காத இறைச்சிகள் ➢ சுகாதாரமற்ற குடிநீர் ➢ சுகாதாரமற்ற உணவு வகைகள் ➢ குழந்தைகள் மண்ணை உட்கொள்வது <u>புழுக்களின் வகைகள் :</u> கொக்கி புழு நமது உடலில் சிறு குடலில் வாழ்கின்றது ஒரு நாளைக்கு ஒரு கொக்கி புழு 0.14 ml – 0.16 ml இரத்தத்தை உடலில் இருந்து எடுத்துகொள்கிறது. கொக்கி புழுக்கள் அதிகம்	ஓலி– ஒளிபேழை முலம் விளக்குதல் ஓலி – ஒளி பேழை முலம் விளக்குதல்

	குடல் புழுக்களின் வாழ்க்கை சுழற்சியை பற்றி விளக்குதல்	இருந்தால் 50 ml இரத்தத்தை வரை ஒரு நாளைக்கு எடுத்து கொள்ளும். இதன் ஆயுள் காலம் 1-5 வருடம் ஆகும். <u>நாடாப் புழு :</u> நாடாப் புழு இறைச்சிகள் முலமாக வரகூடியவை குறிப்பாக நன்கு வேகவைக்காத பன்றி இறைச்சி ஆகும். இதன் நீளம் 2.5 – 3.5 நீளம் ஆகும். <u>கீரிப்பூச்சி :</u> இது நூல் போன்ற வடிவம் உடையது. இதன் நீளம் 1 செ.மீ ஆகும். இதன் முக்கிய அறிகுறி ஆசனவாய் அரிப்பு ஆகும். <u>உருண்டை புழு :</u> மனித உடலில் வாழும் புழுக்களில் மிகவும் நீளமான புழு உருண்டை புழு என்பது குறிப்பிடதக்கது. உருண்டை புழு சுகாதாரமற்ற உணவுகளை உட்கொள்ளுதல் மற்றும் சுகாதாரமற்ற சுற்று சுழல் மூலமாக நேரிடுகிறது. <u>புழுக்களின் வாழ்கை சுழற்சி :</u> புழு தொற்று புழுக்களின் முட்டைகள் மூலம் உடலுக்குள் செல்கிறது. ⇩ பின் சிறுகுடலில் முட்டைகள் பொரித்து இரத்த குழாய்களில் ஊடுருவி நுரையீரல் செல்கிறது. ⇩ நுரையீரலிருந்து தொண்டை வழியாக உணவு குழாய் மூலம் குடலுக்குள் சென்று வளர்ச்சி அடைகிறது. ⇩	ஓலி – ஒளிபேழைமூலம் விளக்குதல்

	குடல் தொற்று பரவும் முறையை எண்ணிக்கையிடுதல் குடல் புழு தொற்றின் அறிகுறிகளை பட்டியலிடுதல்	பின் முட்டையிட்டு மலம் வழியாக வெளியே செல்கிறது. <u>பரவும் முறைகள்</u> : ❖ அழுகிய காய்கறிகள், பழங்கள் ❖ சுகாதார மற்ற குடிநீர் ❖ சுகாதார மற்ற கைகள் ❖ சுகாரமற்ற மண் இவை அனைத்தும் குடல்புழு தொற்று பரவும் முறைகள் <u>அறிகுறிகள் :</u> ○ எடைகுறைதல் ○ வயிற்றுவலி ○ வயிறு உப்புதல் ○ காய்ச்சல், வயிற்றுபோக்கு ○ இரத்த சோகை ○ ஆசனவாய் அரிப்பு ○ பைக்கா மற்றும் வாந்தி ○ புழுக்கள் மலம் வழியாக வெளியேறுதல் <u>கண்ட அறியும் முறைகள் :</u> ▪ வரலாறு சேகரித்தல் ▪ உடல் பரிசோதனை ▪ மலம் பரிசோதனை ▪ இரத்த பரிசோதனை ▪ அதிகாலை ஆசனவாய் மலம் பரிசோதனை ▪ ஊடு கதிர்ப்படம்	ஓலி – ஒளி பேழைமூலம் விளக்குதல் ஓலி– ஒளி பேழைமூலம் விளக்குதல்

	குடல் தொற்றின் சிகிட்சை முறைகளை விரிவுரைத்தல்	<u>சிகிட்சை முறைகள் :</u> ✓ அல்பண்ட சோல் மாத்திரை 15 மிகி (அல்லது) மேபண்டசோல் 100 மிகி/கி ✓ கார்டிமடோன் கழிம்பு - ஆசனவாய் அரிப்பிற்கு ✓ இரும்பு சத்து மாத்திரைகள் ✓ இரத்தசோகை அதிகம் இருந்தால் - இரத்தம் அடைக்க வேண்டும் ✓ நிக்கோலசமைட் மாதிரைகள்	ஓலி – ஒளிபேழைமூலம் விளக்குதல்
	குடல் புழு தொற்றின் தடுப்பு முறைகளை குறித்து எடுத்துரைத்தல்	<u>தடுக்கும் முறைகள் :</u> → முதலில் திறந்த வெளியில் மலம் கழிப்பதை தடுக்க வேண்டும். இது மண் மாசுபடுதலை தடுக்கிறது. → குடிநீரை பாசிகச் செயற்பாடு செய்யவேண்டும். → சுகாதாரமான சுற்றுசூழலை கடைப்பிடிக்கவேண்டும் → மலம் மற்றும் சிறுநீரை கழிப்பதற்கு கழிப்பறையை பயன்படுத்த வேண்டும். → மலம் கழித்த பிறகும், உணவு உண்பதற்குமுன்பும் கைகளை சோப்பு போட்டு கழுக வேண்டும். → குழந்தைகளின் வளர்ச்சியை மாதம் ஒரு முறை பரிசோதிக்க வேண்டும். → வெளியில் செல்லும் போது, மண்ணில் விளையாடும் போதும் காட்டயமாக காலணிகள் அணிய வேண்டும். → குழந்தைகளின் உள்ளாடைகளை நன்றாக அலசி, வெயிலில் உலர்த்த வேண்டும். → நகங்களை இரண்டு வாரத்திற்கு ஒரு முறை வெட்ட வேண்டும். → காய்கறிகளை சமைப்பதற்கு முன் நன்றாக தண்ணீரில்	ஓலி – ஒளி பேழைமூலம் விளக்குதல்

		கழுக வேண்டும். → இரும்பு சத்து நிறைந்த உணவுகள் பேரீச்சம்பழம், உலர்ந்த திராட்சை, தேன், முருங்கைகாய், முருங்கை இலைகள் எடுத்துகொள்ள வேண்டும். → பச்சை இலை உணவுகள் (கீரை வகைகள்) தினமும் உணவில் சேர்த்து கொள்ள வேண்டும். → பச்சை காய்கறிகளை அதிகமாக உண்பதை தவிக்க வேண்டும். → மக்களுக்கு விழிப்புணர்வுகளை உருவாக்க வேண்டும். → வெள்ளை பூண்டை ஒரு வரத்திற்கு 4 அல்லகு 5 பல் எடுத்து வெறும் வயிற்றில் உட்கொள்ள வேண்டும். இது அனைத்து வகையான குடல் புழுக்களுக்கும் உகந்தது. → பூசணி விதையை பொடித்து இரண்டு தேக்கரண்டி எடுத்து மூன்று டம்ளர் சுடு நீரில் போட்டு 30 நிமிடம் கழித்து அருந்த வேண்டும். இது வயிற்றை சுத்தம் செய்கிறது. → தினமும் காலையில் கேரட்டை நன்றாக கழுவி வெறும் வயிற்றில் உண்ணவேண்டும். இவ்வாறு ஒரு வாரம் செய்வதன் மூலம் குடல் புழுக்களை தடுக்கலாம். → மஞ்சளில் இருந்து சாற்றை எடுத்து அல்லது மஞ்சள் பொடியை அரை டம்ளர் நீரில், ஒரு சிட்டிகை உப்பு இட்டு உணவு உண்பதர்க்கு முன் காலையில் ஒரு வாரத்திற்கு அருந்த வேண்டும → வெப்பம் இலையை அரைத்து சிறு உருண்டையாக பிடித்து காலையில் உணவு உண்பதற்கு முன் சாப்பிட்டு வந்தால் குடல் புழு தொற்றை தடுக்கலாம். <u>முடிவுரை :</u> இதுவரை நாம் குடல் புழு தொற்று என்றால் என்ன, என்பது பற்றியும் அதன் காரணங்கள், அறிகுறிகள், கண்டறியும் முறைகள், சிகிட்சைகள் மற்றும் தடுக்கும் முறைகள் என்ன என்பதை பற்றியும் ஒளி ஒலி பேழை மூலம் பார்த்தோம்.	

APPENDIX –XI

PHOTO GALLARY

The investigator distributing structured self-administered questionnaire

The investigator providing information about prevention of worm infestation through video assisted teaching